



ART AND ARCHAEOLOGY

Vol. XXXIV, No. 4

JULY-AUGUST, 1933

THE ARCHAEOLOGICAL SOCIETY OF WASHINGTON

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An Illustrated Bi-Monthly Magazine

Published by THE ARCHAEOLOGICAL SOCIETY
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*Contents of previous issues of Art and Archaeology can be found by consulting
the Readers' Guide and the Art Index in your library.*

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All correspondence should be addressed and remittances made to ART AND ARCHAEOLOGY, Southern Building, Washington, D. C.

Also manuscripts, photographs, material for notes and news, books for review, and exchanges, should be sent to this address.

Advertisements should be sent to the Advertising Manager, Art and Archaeology, The Southern Building, Washington, D. C.

Entered at the Post Office at Washington, D. C., as second-class mail matter. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized September 7, 1918.

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THE WATCH-TOWER OF THE HOUSE OF DON DIEGO COLON, AT SANTO DOMINGO, RISES BETWEEN THE REMAINS OF THE TWO DESTROYED GALLERIES OF THE POSTERIOR FACADE.

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ART *and* ARCHAEOLOGY

The Arts Throughout the Ages

VOLUME XXXIV

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NUMBER 4

THE HOUSE OF DIEGO COLON IN SANTO DOMINGO

By LUIS VÁZQUEZ-TORNÉ

Translated from the original Spanish by Arthur Stanley Riggs

ON the island of Santo Domingo, named by Columbus Ysla Española, are undoubtedly the first colonial structures reared in the Americas. This condition, which in itself would give nothing more than the simple rank of priority to the island, and to the city of Santo Domingo, assumes great importance when related to the historic fact which is synchronous with the discovery of the New World: the death of the Middle Ages and the birth of the modern. In art that is equivalent to saying the end of that artistic expression conventionally known as Gothic, and the appearance of Renaissance art. Between these two epochs there was inevitably a period of separation.

The city of Santo Domingo was born at precisely that moment, and it gives particular interest to the Hispanic-Dominican constructions to realize that the first inhabitants did not at once and completely abandon themselves to the new or neo-classical mode,

but being thoroughly imbued and saturated with the long mediaeval artistic tradition, instead transplanted it in America. For this reason Santo Domingo is the only Gothic city of the New World. Twenty-five years later, after the discovery, when serious attempts at exploration and conquest along the shore of the Gulf of Mexico had begun, no one troubled himself to recall the ancient tradition, which was quickly forgotten.

But, as already stated, Santo Domingo benefitted from it and from the era of transition. This ancient American city can boast with pride of the only survivors of an art strange to the entire American continent.

Among the most notable Dominican edifices, unique and priceless pearl of a precious necklace, is the House of the Admiral, or House of Columbus. This edifice must, in my judgment, have been erected in 1510 (the date is today impossible to fix exactly), a



THE HOUSE BACKS UPON THE LEFT BANK OF THE OZAMA RIVER, WHERE ONCE VESSELS TIED UP.

little while after Diego Colón, first-born son and heir of the Discoverer, arrived in Santo Domingo in his quality of Governor of the new colony. He reared his house on a mound upon the right bank of the river Ozama, about one kilometer from its mouth at the sea. In those days at the foot of the house there was a back-water of the river, where large and small craft of all sorts from both Spain and the west Indies were moored. The house had an elevation of some fifteen meters above the river level.

The groundfloor plan of the edifice is simple and harmonious. It is comprehended within a regular parallelogram of 43.5 by 17.5 metres. The two sides of greater dimension correspond to the two principal façades, the front orientated to the west, the rear to the east. This latter overlooks the

river; the other gives upon the city. The north and south lateral façades form, in relation to the habitable perimeter of the house, two salient bodies four meters deep, since the walls are entrant in a line twenty meters from the central part of the western façade and a little more in that on the east. In this space are the lower porticoes, with ample galleries above. The portico in front consists of four columns and two half-columns scarfed into the façade, which gives five *claros* [clear or unobstructed spaces between columns or pilasters] while in the rear an added column gives six bays. The columns are of the Roman Doric order, surmounted by a beautiful ogival vault along both stories of each façade.

The house is divided into twenty-two chambers and has two stairways; half the

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ART AND ARCHAEOLOGY

rooms are on the ground floor. Of the two stairways indicated on the original plan, one is a winding or circular stair inside the watchtower. There exist remains of a third stairway, but it did not form part of the initial design.

The principal body of the structure was taken upon the ground floor by a great vestibule some fifteen by six and one-half metres in size. Corresponding to this great hall, the floor above had a drawing room or vice-regal salon. Contiguous to it in the south wing five chambers formed the most important part of the house, since they were occupied by Don Diego Colón, his wife, Doña Maria Álvarez de Toledo, his sons and someone closely connected with the fam-

ily. In my opinion the north wing was tenanted by servants; it also contained the dining room, kitchen and various domestic and private offices. The ground floor must have been destined to accommodate male visitors and their menservants.

Opening through the western portico, the principal door of the house is formed by a depressed or flattened arch of about three and one-half metres in height. About the opening runs a frieze which begins near the ground, develops between two little running mouldings, and above the lintel unites with its fellow from the other side. A fine thistle sculptured in relief forms its ornamental motive. In the space between frieze and lintel, the upper part is occupied by a



THE OBLIQUE GATEWAY OF SAN DIEGO THROUGH THE CITY WALLS, FRONTING THE RIVER AND CONTIGUOUS TO THE HOUSE OF COLUMBUS. THIS GATEWAY WAS THE FIRST ONE CONSTRUCTED IN THE WESTERN HEMISPHERE.

ART AND ARCHAEOLOGY



REMAINS OF THE LOWERMOST EASTERN ARCHWAY,
SEEN FROM THE GROUND FLOOR OF THE COLUMBUS
HOUSE.

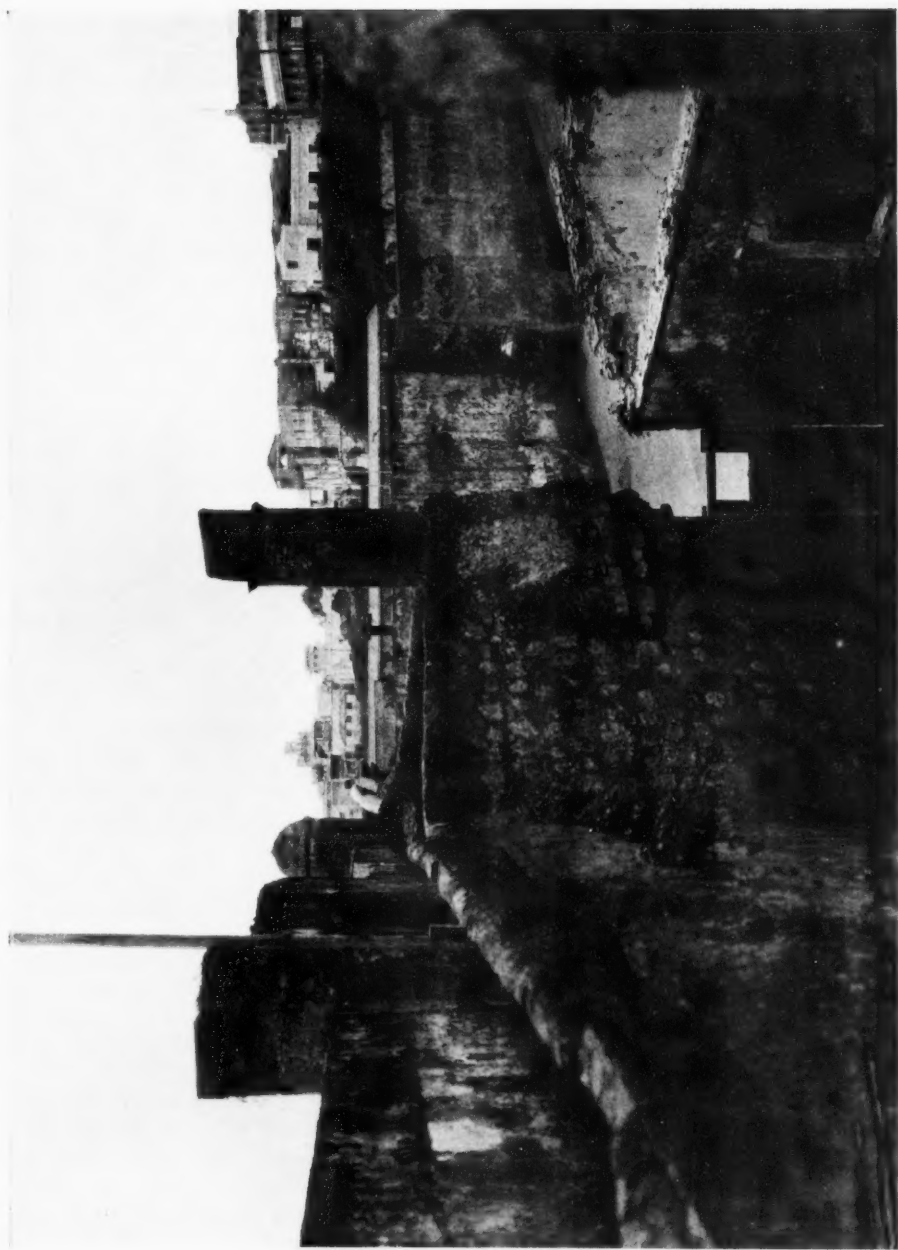
knot made from a belt-line which develops gracious curves and terminates at each extremity in a roll. Certain letters of the motto or legend carved upon the belt are still visible, but unfortunately do not form complete words, thus leaving the motto illegible.

Under the same portico are three more doorways, two very low, the other like the main entrance, high enough to permit the entry of horses. Worthy of mention also are the bilobulate arches of the south façade, and the festooned ones of the east and west sides, all on the upper floor. A quadripartite vault with nervatures of pointed brick and a moulding covers the spring of the arch of the old stairway.

The exterior bearing-walls of the edifice are about one metre in thickness while the interior partitions measure about 75 centimetres thick. Very low doorways on the

ground floor give entrance to the different chambers. The lintels affect two forms of architecture, one half-pointed on the exterior face, flattened on the interior. The foundation of the house—in splendid condition—rises from dry ground composed of lightly ferruginous marls. The work is solid and compact. It was constructed with limestone blocks like the walls and partitions, which are in good condition except for small parts of little importance. Perfectly square blocks form the corners, whose perpendicular is so regular, so correct, it compels admiration for the excellent masons capable of raising such a structure.

The upper floor of the house was covered by an *azotea*. Today neither ceilings nor floors exist. The rooms, like the porticoes and galleries, are bare and open. Only the walls have victoriously resisted through the long course of four and a half centuries the hurricanes and earthquakes which from time to time have devastated the city. A methodical exploration of the ruin has given me sufficient testimony as to the materials of its construction to enable me to lay out a plan for its reconstruction. Earth has been thrown back in such a manner inside the edifice and so heaped up all around it, that nowhere can there be found a single archaeological stratum. Seekers after hidden treasure—veritable pests to all archaeological explorers—have long since made impossible any discovery of interest because they have carried off everything of value and wrought havoc with the rest. They have even done more: they have torn down the stairways to seek under the steps for the treasure trove rumor declared was hidden there. For a century—from the last days of the Spanish domination until some twenty years ago—this admirable house was the refuge of worthless fellows and of the garbage and dung collectors of the city. Sometime since, the Dominican Government placed a permanent guardian over the ruins. This, of course,



LOOKING ALONG THE CITY WALLS OF SANTO DOMINGO, WHERE SOLDIERS ONCE STOOD GUARD. THE WALLS CONNECT DIRECTLY WITH THE HOUSE OF COLUMBUS. THE ROOFLESS LITTLE EDIFICE AT THE RIGHT IS CONTEMPORARY WITH WALLS AND PALACE, AND WAS PART OF THE COLUMBUS PROPERTY.

ART AND ARCHAEOLOGY



THE ADMIRABLE QUALITY OF THE MASONRY IS EVERYWHERE APPARENT, AS IN THIS VIEW, LOOKING SOUTH FROM THE ENTRANCE VESTIBULE.

has prevented any further acts of vandalism.

Up to this point I have briefly described the house as Diego Colón left it constructed. But, did Don Diego finish his dwelling according to the original plan?

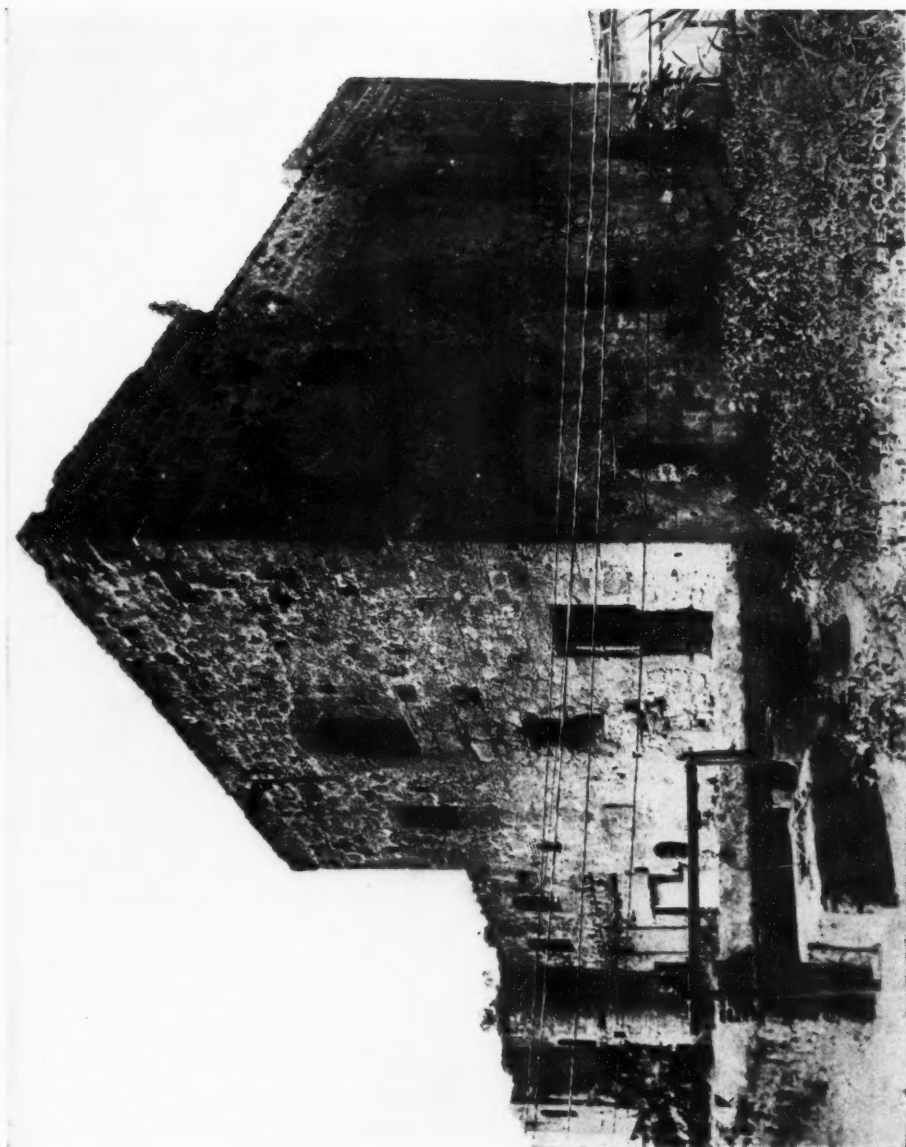
This was the question I asked myself when the Secretariat of Fomento and Public Works charged me with the exploration of the ruins. No prudent expert will see with any pleasure or could admit, a total development of 122 metres of facade, with only 10.5 metres of elevation including the guard-rail of the azotea, in an edifice whose constructive and artistic importance is evident. The very slight height of the house in relation to the length or width of its façades, further augments the unusual character of its proportions, and the impossibility that a competent architect would conceive such a plan. It is impossible to question the skill of its principal master, since there is not a

detail of the edifice which does not boldly proclaim his supremacy.

In my Memorial to the Secretariat, I had no hesitancy in stating that the house of the Admiral was never finished as projected. Nevertheless, I could not give documentary proof for this statement. The Dominican Republic has no historic archive, as the English corsair Drake in 1586 destroyed the records of the new-born colony. Later on the Spanish authorities, on their final retirement from the Island, midway the XIXth century, carried with them the archive established after the Drake episode, depositing it in an edifice contiguous to the Cathedral in Havana. Here, alas, gutter leakage and bookworms quickly finished it. I was, therefore, obliged to reread the two contemporary historians best informed as to what belonged to the Columbuses, without forgetting a subsequent historian also worthy of credit—the Reverend Father Bartolomé de Las Casas.

Although in his *History of the Indies* he speaks at some length of the House of Don Diego, he nevertheless says nothing to us about its having been finished. Antonio Herrera, immediate successor of the generation of Diego, is no more explicit in his book. The round affirmation that the house was *not* finished is given by Hernández de Oviedo in his *Summary of the Natural History of the Indies* (edition of Toledo, 1526; dedicated to Charles I) in which he says, describing the house in Chapter 2: "... that it is the most beautiful sight which can be, and as for the other rooms which are unfinished, they are of a style conformable to the part which is finished". In the same year that Oviedo's book appeared, Diego Colón died in Spain after three years of absence from Santo Domingo, where he had left his wife and seven sons. The proof, then, is evident.

But why did not Don Diego finish his house and what must have been the plan of it by which we may know what was left un-



BACK (EAST) AND SIDE (NORTH) VIEW OF THE REAR FACADE OF THE COLUMBUS HOUSE.

ART AND ARCHAEOLOGY



ENTRANCE ARCHWAY IN THE MAIN OR WEST FACADE, HOUSE OF DIEGO COLÓN.

done? Speaking generally, the years in which the first *conquistadores* and populators planted their feet firmly in the new world, were troubled. They never ceased to move, those men of iron. Like the novices in a Benedictine Monastery, slaves of intense passions, they were confident of their own valor whatever the test. Capable of the greatest heroism, continually risking their lives, accustomed to the greatest privations and sufferings, they were little troubled by scruples so long as they could attain their ends. They were true lions, and like them, went roaring through their conquests.

When Diego Colón arrived in the Ysla Española in 1509, as we have already seen,

he came as its Governor. He took control over from the hands of Nicolas de Ovando, a man of robust character who above all else knew the caste of men who govern and what means had to be taken to keep the new colony peaceful.

Diego Colón was the reverse of the medal, a man of almost modern sensibilities, enemy in principle of all violence, educated at the court of the Catholic Kings, living beside the Prince don Juan, whom he served as page until his death. Married a year before to a niece of the Duke of Alva, a lady closely connected with the royal family, "he had," Father Las Casas tells us, "the person of a lord and was well conditioned and of a good disposition," qualities none too successful for governing a colony where calumny and intrigue developed so widely the Governor had to stay his hand lest he be judged a man of evil temper.

Immediately after his arrival the dissensions began, with the formation of two political parties, that known as the King's party, headed by Miguel de Pasamonte, royal treasurer, and that of Diego Colón. Pasamonte was a man of bad faith and perverse intentions. He fathered the gossip that the Governor wished to appropriate the island for himself, contrary to the interests of the monarchs, and that for this reason he was building a "strong-house" in which he could defend himself.

History has judged Ferdinand the Catholic, King of Aragon, as a prince of exceptional intelligence, very astute and sagacious, free of any fears when treating affairs of state, to which he sacrificed everything. With a king of such character, who watched his colonies with a jealous eye because of the exactions the Discoverer imposed in the Capitulations of Santa Fé, the result is clear beforehand. Ferdinand gave tacit countenance to the calumnies, feigning to believe them. This equivocal conduct toward the man whose only fault lay in the heritage he

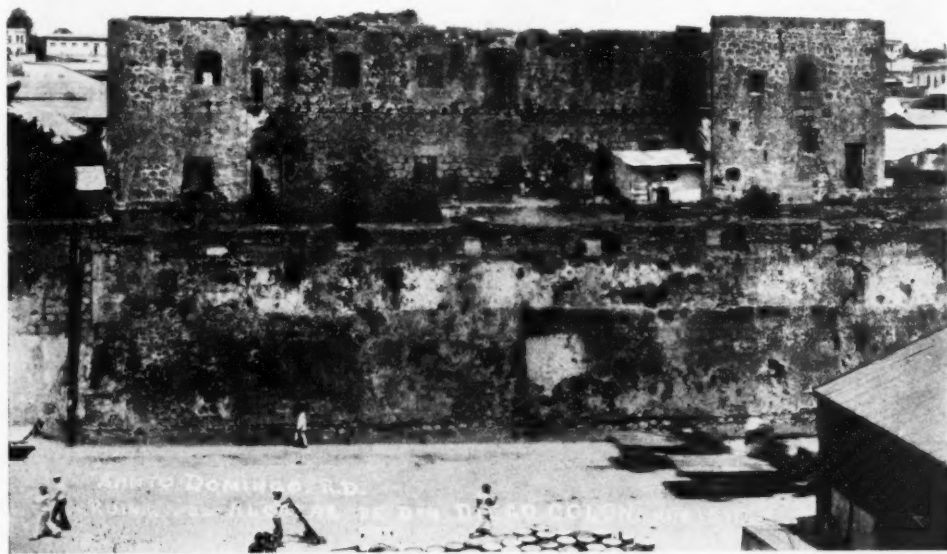
ART AND ARCHAEOLOGY

had received from his father, was unjust. It weakened the power of the irresolute Governor and permitted the King to leave unfulfilled the stipulations of Santa Fe, as well as to juggle the titles of Admiral and Viceroy away from Diego Colón, to whom they properly belonged.

The construction of the house was interrupted while the discussion raged as to whether it was a *casa fuerte* or an ordinary country house: a defensible structure or a mere mansion. La Casas, who mediated in the dispute, asserted that it was a plain house, and cites the testimony of Amador de Lares, "very expert in warlike matters". Famous expert, this Royal Auditor, who meddled officiously in matters of war and found

"more than ample fenestration" in a house which had not one single window in its façade which could be reached without a ladder! Certain it is that this house of lordly aspect, inspired by the Italian architecture of the period and which recalls, even without our knowledge of its plans, the decoration and ornament of the Palazzo Salimbeni of Siena and that of the Palazzo Pubblico of Perugia, was a well-thought-out strong-house, erected by a man whose first care must have been security, with entire safety from any riot by well-armed whites or from a sudden uprising on the part of the Indians.

The flanks and the rear of the house where Lares saw accessible windows, had to be defended by a high barrier wall of a minimum



REAR FACADE (EAST) AND THE WALL AT THE FOOT OF WHICH WAS THE WHARF ON THE OZAMA WHERE THE SHIPS MADE FAST.

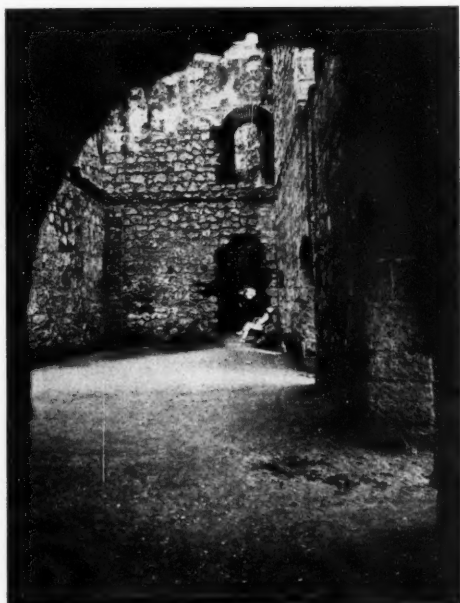


THE FRONT OF DON DIEGO COLON'S PALACE IN SANTO DOMINGO. IT IS A DISPUTED QUESTION WHETHER IT WAS A REGULAR OR A DEFENSIBLE MANSION.

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ART AND ARCHAEOLOGY



LOOKING NORTH THROUGH THE ARCHES OF THE GROUND FLOOR. ONE OF THE ARCHED DOORWAYS OF THE FIRST FLOOR IS SEEN AT THE RIGHT.

height of 4.75 meters, whose dressed stone attachment to the house proper still endures. The interrupted construction reached the level of the lintels of the openings into the upper story, and the line which marked the cessation of the work is still visible in spite of the passage of centuries. Construction was begun again, but without the care exercised in the earlier masonry. Diego wished to roof over the upper story without delay, but renounced for the moment the crowning of the wings of the edifice. The merlons common in edifices of this type and purpose were suppressed and the house was finished off with a low guard-rail on top, built from leftover materials. The "four rooms of the house" which were seen by Fernández de Oviedo in 1514, were the wings, which he mistook for parts of the main structure. Oviedo reached Sto. Domingo in that year, and six years later, when

he left the island for his new post as Governor of Darien, they remained as he had first seen them.

It is not at all difficult to reconstruct the original plan in its fundamental lines, so far as the completion is concerned, if one is at all versed in the architecture of the period. Behind the elevation of the wings we encounter a plan so harmonious and simple it admits no other than obvious solutions, while the passageway and entrance to the various chambers oblige us to follow reason only.

In my judgment, there must have been a little gallery with two openings in the façade of each of the two wings. The watchtower rose to a height of some twenty or twenty-two meters. It is idle to suppose that this tower was destined merely to contain a stair giving access to the upper floors, instead of to provide a place whence watch could be maintained over the city, the open country beyond and the immediate sea. Of all the problems the chief architect had to solve, the spiral staircase presented the most obstacles, was the least convenient to use and proved the most difficult to build. It is logical, therefore, to suppose that the tower was really a watchtower and not a simple shell for the stairway. Its foundation tends to prove this, since instead of contenting himself with opening a simple circular trench to support the walls, the architect constructed a massive platform more than two meters thick. From the aesthetic point of view it is obvious that a tower emerging from the rest of an edifice, adds beauty to the entire fabric.

One question remains to be answered about the mansion. Nowhere upon it is there a single sculptured heraldic shield. Why? It is astonishing that a foreigner new-come into the nobility should not carve the glorious arms won by his father through

(Concluded on Page 200)



THE FORGE OF VULCAN.

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VELAZQUEZ

By WILLIAM HOWE DOWNES

TO hear painters talk about Velázquez with bated breath and accents of respect so deep as to approach reverence, one would suppose the art of painting began and ended with him. It is not so, of course. He was a great master, but there were other great men before him, and it is not beyond possibility that there will be others after him. In the meantime, the enormous influence that he has had within the last half century or so has been altogether wholesome, tending towards the clarification of the craft and the abandonment of meretricious methods. If so many men must be followers, it is something to be thankful for that they should at least aspire to mold themselves upon a model so eminently worthy and noble.

We speak of the aristocracy of birth and breeding, of wealth, of intellect and culture; it really seems as if Don Diego de Silva y Velázquez had all of them. Your true hidalgo is a fine all-round gentleman, unassuming and democratic. He shines by virtue of negative merits; is neither obsequious nor disdainful; acts no part; is always himself under all circumstances. He meets all sorts and conditions of men with the same even amenity and inbred courtesy, bears himself with natural dignity, without fawning and without condescension. King and buffoon, the high and the low, nothing human is alien to him. He is to the manner born, and has no need of asserting himself. Can we not see all this and more in Velázquez's portrait of himself? Does it not speak from his historical and genre compositions? Does it not permeate everything that came from his hand? The naturalness of it is unmistakable; there is complete impartiality and the note of impersonality in all his work. Sobriety and even austerity are the out-

standing marks of his style. The stark simplicity of his manner disconcerts the casual observer, who wonders what there is in him that all the world unites in singing his praises. It reminds us of nothing but what we have seen in nature. No false notes; no redundancy; no mannerisms; no monotony. Merely the truth of appearances; nothing extenuated; naught set down in malice; nothing done for effect. Pompous and noisy performances are all very well for the parvenu, but, as Gautier remarks, Velázquez is "*trop bon gentilhomme pour se faire remarquer*", and, above all, too good a painter.

The essence of a good style is expressiveness. Commenting on Pascal, Walter Pater says he was a master of style because, as his sister tells us, he had a wonderful natural facility for saying what he wished to say



DON BALTASAR CARLOS.

ART AND ARCHAEOLOGY



PHILIP IV IN COSTUME.

in the manner that best suited his purpose. Such is the style of Velázquez. He saw his subject as a whole, rendered it as a whole, and varied his technique to fit each particular motive. He had no fixed recipe for making a hand, nose, eye, ear, but used his remarkable mind and eyes to characterize the thing in its just relationships to the rest of his picture as it appeared under a certain light and in a certain atmosphere. Withal, he understood the importance of sacrifices, a part of the *métier* mastered by none but master-painters, the "purgation of superfluities". He did not exhaust the subject nor the looker-on; his instinct told him when

and where to suggest rather than explain. Such reserve and brevity of statement are the artist's tacit tribute to the supremacy of nature.

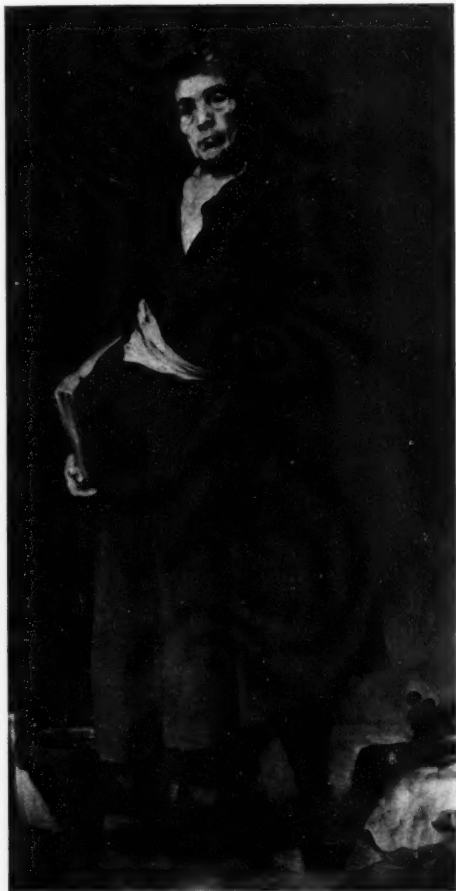
His magnificence is compared by Gautier to that of an old hereditary fortune. It is tranquil and intimate. No riots of color, no novel scintillations, no brilliant gewgaws. All is muted, a little understated, "like the dull silver of old family plate". He has a haughty breadth and a scorn for useless detail. In his portraits, what was apparently nothing more than a faithful copy of nature brought the soul to the surface (*amenait l'âme à la peau*), and presented the inner



DONA MARIANA DE AUSTRIA.

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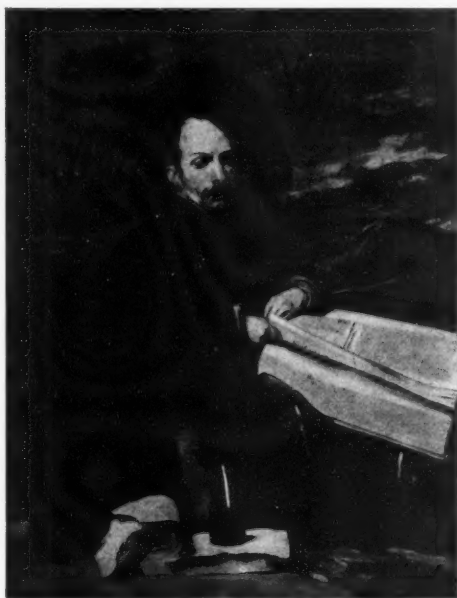
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as well as the outer man. Thus his portraits tell us better than all the historical chronicles, the secrets of the Spanish court.

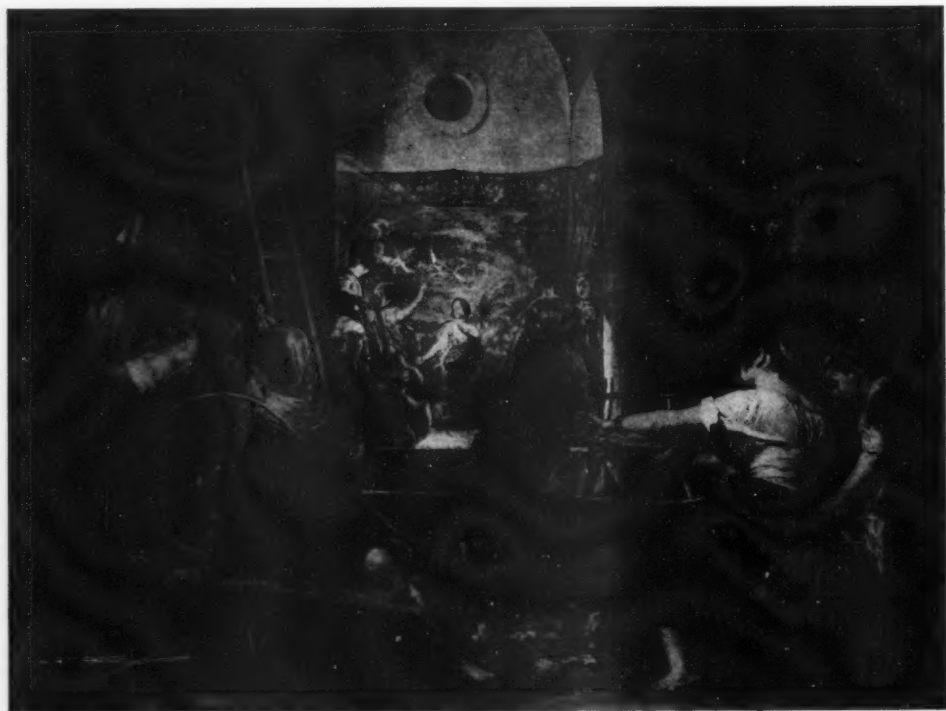
He understood the Spanish king because he was himself Spanish and kingly. He suggested the look of majesty by the simplicity, breadth and dignity of his design, not by any specious rhetoric or bombast. Indeed, who can doubt that Velázquez lent to Philip more than Philip could repay, generous as he was to his favorite painter. The cordial relations between these two men were singularly creditable to both sides, and

when we recall the honors and emoluments lavished upon the artist by his king it must be admitted there is something to be said for decadent dynasties.

In the Madrid Museum there are four pictures by Velázquez—aside from his portraits—which have been the objects of more study, attention and adoration on the part of artists, than any other four paintings in the world during the past forty years. These are the *Maids of Honor*, the *Tapestry-Weavers*, the *Surrender of Breda*, and *The Topers*. The Spanish titles are commonly used: *Las Meninas*, *Las Hilanderas*, *Las Lanzas*, and *Los Borrachos*. A considerable literature on these works exists, beginning with the early Spanish writers, authors with resounding names, and leading up to a group of able modern critics—Beruete, Ford, Stirling-Maxwell, Stevenson, Blanc, Gautier, Curtis, Justi, Madrazo, Michel, and Armstrong. Neither the early Spanish writers nor the later authorities can be said to equal



THE DWARF EL PRIMO.



LAS HILANDERAS, OR THE TAPESTRY WEAVERS.

the temperamental ardor, the pictorial sense, the rich vocabulary or the power of vivid description to be found in the works of Théophile Gautier, who found his way to Madrid before railways existed in Spain, and had all the joy of an adventurous discoverer. Of his description of a fine picture it is not too much to say that it is often as much of a work of art as the picture itself. His *Voyage en Espagne*, probably the most entertaining and delightful book of travels ever written, has been the means of leading many hundreds of tourists to make the journey to the Peninsula.

There is no such thing as a perfect picture, but it would be difficult to find one more nearly approaching perfection than *Las Meninas, The Maids of Honor*. It was painted in 1656, the artist's best period; it is

an upright canvas, representing the interior of the painter's lofty studio in the old palace, or Alcázar, in Madrid. There are nine figures. In the centre of the foreground is that of the lovely little Infanta Margarita, who is posing for her portrait. The painter himself is standing in front of his easel, on which is a large canvas, of which we see only a part of the back, at the left. The young royal model, standing motionless in her stiff costume, is resting for a moment, while her two maids of honor are conversing with her. One of them, Doña Maria Agustina, daughter of Don Diego Sarmiento, kneeling, in profile, at the left of the principal figure, offers her a drink of water in a *búcaro*. The other, on the right, Doña Isabel de Velasco, daughter of the Count of Fuensalida, appears to be speaking to the princess. At the



LAS MENINAS, OR THE MAIDS OF HONOR.

ART AND ARCHAEOLOGY

right of the foreground, two of the court dwarfs, Nicolasito Pertusano and Mari Borbola, are teasing a big dog, who is evidently quite accustomed to their tricks, and pays no attention to them. A little beyond the main group we see a lady in waiting, Doña María de Ulloa, and a palace guard; and at the far end of the room an open door permits us to see in a strong light Josef Nieto, *apostador* to the queen. A looking-glass on the wall reflects the images of the king and queen, who are seated opposite to it and close to the wall, out of sight.

The illusion of reality is complete. The observer feels that he is looking at the real scene. The splendor of truth! That is the first thought. But that is not all. The splendor of knowledge, of skill, of exquisite workmanship, of taste, selection, and style. The abiding charm of reserve and understatement.

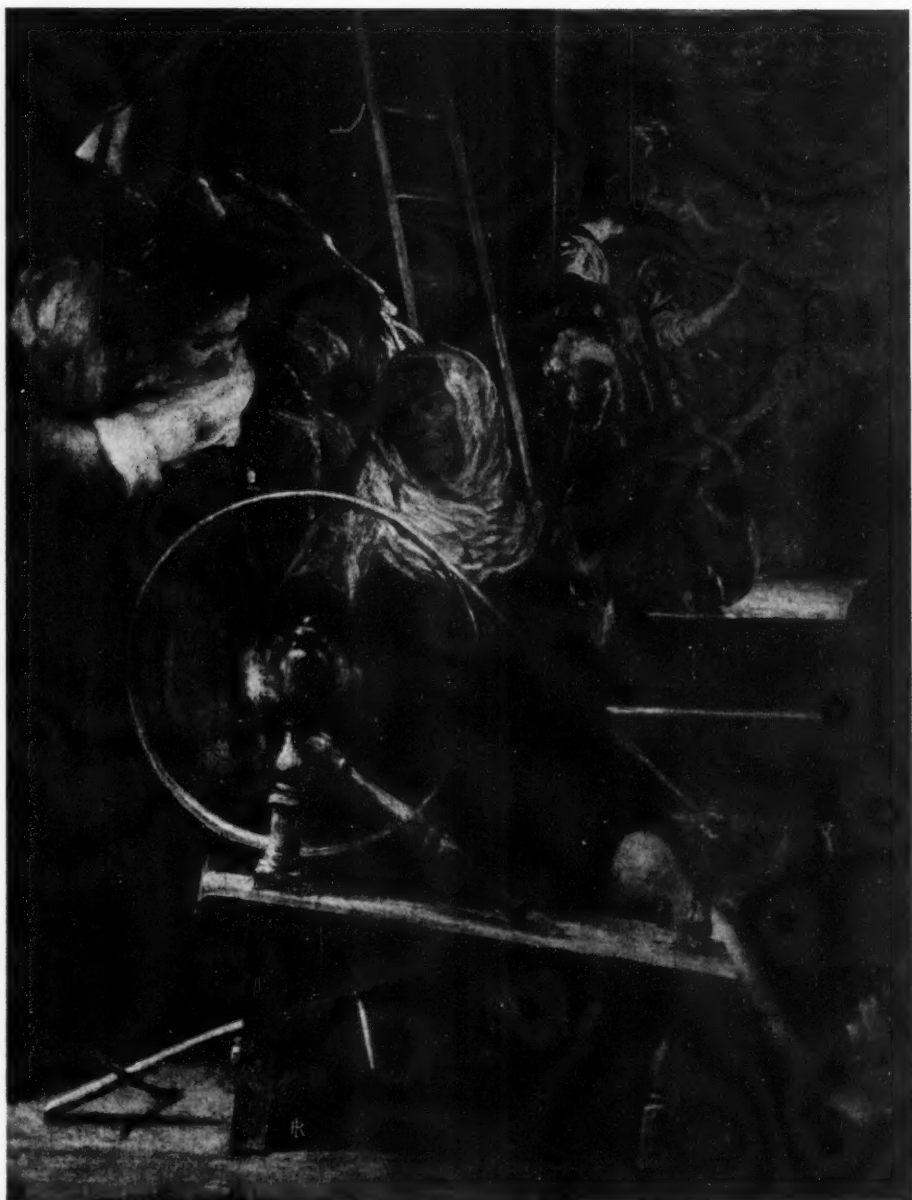
The picture known as *Las Hilanderas*, *The Tapestry-Weavers*, is a genre painting enlarged to heroic proportions. A group of court ladies are making a visit to the royal tapestry factory. This subject, simple enough in its elements, is composed in the most ingenious fashion. In the shadowed foreground is the interior of the workshop where several women are at work. On account of the heat they are wearing only light shirt-waists and petticoats, virtually the same scanty summer costume adopted by the cigar-girls in the government tobacco-factory in Seville to this day. At the left, a young woman is lifting a red curtain; in the centre, an older woman is working a spinning-wheel; and at the right, another woman, turning towards the observer a nude shoulder, winds a hank of yarn on a reel while she stares at the distinguished visitors in the background. The workshop opens into a sort of gallery in which is displayed a collection of finished tapestries hung on the wall. These pieces are being examined by the visitors. A flood of light pours into

this part of the interior from an unseen window at the left. The atmosphere and light of this painting are unsurpassed in actuality, and Gautier is right when he says no one has ever painted the ambient atmosphere, that intangible element, better than Velázquez.

But there is still another and perhaps even subtler element to *Las Hilanderas*. Its vivacity is outstanding because of the uncanny skill with which the painter has almost audibly translated movement and sound for us. The brisk chatter of the ladies with the saleswomen in the outer room, the whirr of the swiftly turning wheel, the purring cat half asleep in the foreground—all these by the magic of Velázquez' brush cease to be mere realistic ideas. They assume an importance, a tangible vitality only the touch of a master could give, and lift the picture, great as it otherwise is, to even greater heights as inspired naturalism never equalled before or since.

The *Surrender of Breda*, commonly known as *Las Lanzas*, which combines Spanish realism with fine portraiture and history, is in the grand style, and perpetuates an incident exemplifying in the most striking manner the magnanimity of the Spanish commander, the Marquis of Spinola. Gautier's description of this famous canvas is a brilliant example of impressionistic word-painting. Very freely translated, it runs as follows:

"A vast sky, luminous, vaporous and airy, richly brushed in with a full impasto of ultramarine, overhangs the bluish distance of an extensive countryside, where silvery sheets of water shine in the bright sunlight. Here and there the smoke from conflagrations rises in fantastic swirls to the clouds above. In the foreground, at either hand, a large group of figures is massed; here the Spanish troops, there the Flemish, leaving clear between the lines, for the meeting of the victorious and the defeated generals, an



DETAIL OF THE TAPESTRY WEAVERS.



LAS LANZAS, OR THE SURRENDER OF BREDÁ.

open space that the painter has made to recede towards the depths of the composition with an array of military and flags, all deftly indicated in a few knowing touches. The Marquis of Spinola, bareheaded, hat in hand, holding the commander's baton, and wearing his black armor damascened in gold, greets with chivalrous courtesy—such courtesy as is manifested by generous foes capable of respecting one another—the Governor of Breda, who, bowing low in a noble posture of humility, offers him the keys of the city. Flags with quarterings of blue and white, their folds fluttering in the breeze, are happily contrived to break the straight lines of lances held high by the Spanish soldiers. The marquis' horse, sharply foreshortened as he stands with his rump towards the ob-

server, and his head slightly turned, is placed so as to dissimulate the rigid military lines beyond him.

"It would be difficult to render in words the chivalrous Spanish air of dignity and exultation which distinguishes the faces of the staff officers. They express the serene joy of victory, the tranquil pride of race, and the habit of great events. These personages would be under no necessity of proving their mettle in order to obtain admission to the Orders of Santiago and Calatrava. They would be received on their faces, so evidently are they *hidalgos*. Their long hair, their turned-up moustaches, their regal bearing, their steel gorgets and corselets and leather coats serve to make of them in advance ancestral portraits fit to hang, em-



VILLA MEDICI IN ROME.



LOS BORRACHOS, OR THE TOPERS.

blazoned with coats-of-arms, in the galleries of castles. No one has ever known how to paint the gentleman like Velázquez, who depicts him with a superb familiarity, as a peer. He is no poor embarrassed artist who sees his models only at the moment of the pose, and has never lived with them. He knows them in the intimacy of the royal apartments, in the grand hunts, in stately ceremonies. He knows their bearing, gestures, actions, attitudes and physiognomies. He is himself one of the king's favorites (*privados del rey*). Like them, and even more than them, he has the entrée to the royal presence. The nobility of Spain, in having Velázquez for its portraitist, could not say, like the lion in the fable, 'Ah! if lions only knew how to paint!'"

Finally, Gautier's description of *The Toppers* is not only graphic and appetizing but characteristically unctuous, enlivened by touches of sly humor recalling certain inimitable passages in his romantic tale of *Le Capitaine Fracasse*. This picture, he says, is a sort of bacchanal devoid of mythology and rendered in realistic form. A young rascal nude to the waist, and crowned with a garland of vine-leaves, which confers upon him, as it were, an order of bacchic knight-hood, is seen sitting on a wine-cask by way of throne. Before him kneels an old soldier, and at his feet are a wide-lipped jug and an empty cup. A half-nude fellow holding a glass in his hand reclines carelessly upon his elbow on a mound behind the *praeses* of the ceremony. In the corner at the left another



THE ADORATION OF THE MAGI.

ART AND ARCHAEOLOGY

personage, sitting on the ground, is lovingly hugging a jar which assuredly is not filled with water. Both of these confrères have the crown of vine-leaves; they have been received as licensed toppers of the order of the holy bottle. Behind the old soldier are three postulants whom it would be unjust not to admit to the fraternity, for they have the air of loyal drunkards and perfect *canailles*. Armed with bowls and goblets, they are all ready to celebrate. Farther off, a ragamuffin whose threadbare coat reveals a shirtless chest contemplates the scene ecstatically, his hand on his heart; he is a little dilapidated to mingle with these noble lords, but then he has so much zeal, such an unquenchable thirst! In the background, a beggar, seeing a gathering of people, profits by the opportunity, and, lifting his vile hat, hold out his hand for alms.

This is not as one might suppose, a simple easel picture in the Flemish manner; the figures are life-size and full-length. The vulgar subject seemed to the painter quite as important as a Triumph of Bacchus, an Intoxication of Silenus, a Dance of Maenads, or any other fiction taken from antiquity; for him it had the advantage of being real. Into it, with deep seriousness, he put all his art, his science and his genius. The torso of the principal figure, whose whiteness offers such a contrast to the brown tones of the faces that surround it, forms the felicitous centre of light for the whole composition; and no man's pencil ever made flesh more supple, better modelled, or more alive; the eye has the soft stupidity and the mouth the vague smile of inebriety. As for the heads of the other comrades, bronzed, tanned, and tawny as Cordovan leather, showing the long teeth of ferocious appetite, with their liquid

glances of lust gleaming from amidst a network of wrinkles, they remind us of the types of the *Tuna*, that Spanish Bohemia which is so amusing, picturesque and brilliant.

It is an exaggeration to set up the claim that Velázquez is the first of all painters and an unequalled master; that his art is a new revelation of genius and a superlative creation. Such extravagant estimates do less than justice to other masters in art. As a portrait painter Velázquez is not the unique and isolated phenomenon that his idolaters would have us believe him. He is not unrelated to his predecessors. He has no monopoly of all the moral and technical qualities. He differs in the degree and not in the kind of authority and range of his genius. His distinction is chiefly in the completeness of his gifts and acquirements, not so much in their novelty. A fair and unbiased comparison of his portraits with those of Leonardo, Titian, Raphael, Rembrandt, Hals, Rubens and Van Dyck would not result in any diminution of their renown in this field. In psychological subtlety, insight into character, the expression of life, mood, personality—whatever contributes to the superiority of a portrait—Velázquez can be matched by other masters, and, in a few instances, excelled as to this or that single quality; but his triumph is that he possesses such a rich combination of science and art, such a complete equipment; that he is, as it were, armed at all points with a balanced and rounded talent. His very limitations constitute æsthetic merits and serve to keep him in the main current of the art stream. His style is the perfection of adaptation of means to purpose.



THE REAR WALL OF THE MONASTERY.

THE MONASTERY OF RILO

By CLARENCE AUGUSTUS MANNING

A VISIT to the monastery of St. John of Rilo is today one of the means of understanding the spirit of the Bulgarian past and the accomplishments of the people in the field of art. It is today a symbol, and more than a symbol, of the greatness of the nation and a proof of the endurance of the national spirit under long centuries of oppression and defeat.

Like all the great monasteries of the East, the Monastery of St. John of Rilo was not established as a centre from which the influence of Christianity could spread out over the neighboring country. It was located in an isolated spot in order that the monks and Christians who were weary of the conflict with the very modern, urban Byzantine world could find a refuge from the commotions of the day and the political and social upheavals of the time.

St. John of Rilo, the son of a shepherd, was born in 876 in a village not far from Sofia. After the death of his parents he entered a monastery and later, as a hermit, made his way up the gorge of the Rilo river to the present site of the monastery. For years he lived further up in the mountains in a cave. The fame of his sanctity spread throughout Bulgaria, and when he died, in 946, there was already the nucleus of a monastery among his pupils and admirers.

There is little or nothing left of the original foundation. St. John of Rilo became one of the most popular Bulgarian saints. His fame and his monastery grew; but it was long before his body was to be left there in peace. Whether he was first buried in the monastery or not, we find the remains in Sofia in the twelfth century. From there they were carried by the Hungarian King

ART AND ARCHAEOLOGY



THE MAIN ENTRANCE TO THE MONASTERY.

Bela III to Gran. They were returned, however, to Sofia within four years. Soon after they were carried to Tirnovo, and then in 1469 carried back in solemn state to the Monastery of Rilo. For this the Turkish Sultan Mohammed II gave the necessary permission and the entire journey from Tirnovo to the monastery was carried out with halts at all the leading cities of Bulgaria for the prayers and homage of the multitude.

The early history of the monastery itself is more or less unknown. We know that St. John of Rilo in his lifetime had gathered together many disciples and pupils and that they lived in some form of a community. We do not have the names of the *hegumens*

or abbots at this early period and we cannot be too sure that the site of the original building was exactly on the spot between the Rilo and the Drushlyavitsa rivers, where the monastery is located today.

We do know definitely that the monastery took substantially its present form in 1335 when Khrelyo richly endowed it. Khrelyo was perhaps an extreme type of the semi-independent feudal lord of the Balkans before the coming of the Turks. In his principality near Struma, he acknowledged the supremacy now of the Serbs, now of the Byzantines. Later at Rilo he erected a stone church and built a strong tower for defence on the present site, and gave the monastery much money. Still later he withdrew from the service of Dushan, the Serb Emperor, but was forced almost at once to sue for peace. At this time Dushan forcibly turned him into the monk Khariton and imprisoned him in the monastery he had so greatly aided. The next year—1343—he met a violent death there. Soon afterwards along with the surrounding country, the monastery fell into the hands of Dushan, who was endeavoring to conquer the entire Balkans; but in 1378 we find it honored as an old Bulgarian foundation by the Bulgarian ruler, Ivan Shishman.

It was not long before the Turks appeared on the scene. At first the monastery fared well but within a half century after the fall of Bulgaria, the buildings had been plundered and reduced to a complete ruin. In the middle of the fifteenth century three Bulgarian priests, Ioasaf, David, and Teofan, sons of Bishop Iakov of Krupnik, repaired the building partly from their own means and partly from gifts which they had collected among the Bulgarians of the neighborhood. Then they made an alliance with the Russian Monastery of St. Pantaleimon at Mount Athos in a desire to improve the

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condition of the Monastery. Still later they brought back, as we have seen, the relics of the patron saint and founder.

For more than three centuries the monastery continued as one of the most important Bulgarian centres. During the entire Turkish occupation it suffered the fate of the Bulgarians, now in relatively easy situation, now oppressed with the utmost severity.

that "the foundations must be placed on the old foundations and that they build in the form which existed before the conflagration". In general this was done, but at the same time the monks took the opportunity to rebuild the church.

They complained that the old church was too small and that it was so divided into three sections as to be useless for their purposes.



THE COURTYARD IS PAVED WITH COBBLE-STONES, AND AROUND THIS ARE THE BUILDINGS.

Now it was attacked by bandits, and the monks moved to take refuge in the protecting tower; now it was subject to exorbitant financial demands by the Patriarch of Constantinople. Always it sustained the national spirit and the monks who went out from it played an important part in the movements of the day.

On January 13, 1833, a fire broke out in the monastery and destroyed nearly all the buildings except the church and the tower. The friends of the monastery and the monks at once made plans for rebuilding it and secured permission to do so but on condition

With sad hearts, therefore, they tore it down and replaced it with the present structure.

The work of reconstruction was placed in the hands of a folk architect, Pavel of Krimin, near Kostur, a city now included in Yugoslavia. This man was not a trained architect but a man of the people selected for similar work which he had done elsewhere. Around him gathered a group of ikon-painters representing the various schools of the day, especially the school of Samokov, which was just beginning to feel the influence of modern European secular and religious art.

The Monastery in its present form is the

ART AND ARCHAEOLOGY



THE CLOISTERS.

most important monument of the early nineteenth century in Bulgaria and we can use it in most of its details for a knowledge of mediaeval Bulgarian monasteries.

It consists of a large, irregularly rectangular courtyard entered through an entrance on the west side. In this courtyard is the church, still small and surrounded by a colonnade under which are painted scenes from the Old Testament, all carefully marked with the names of the persons represented. The outside of the church offers a commentary on the Bible of a type which is reminiscent of the Middle Ages. Both inside and outside the church, dedicated to the Birth of the Mother of God, is built in the traditional form of an Orthodox church with a central dome and four smaller ones at the corners.

The courtyard is paved with cobble-stones and around this are the buildings. These form an unbroken wall, very plain and for-

bidding on the outside but where they are open on the court, forming rows of arcades, usually four stories in height. The number of monks is greatly diminished, for there is only a handful as compared to the hundreds that dwelt here at the height of the monastic period.

The color scheme is gay and attractive, for church and buildings alike are built in the striped style that is so popular in Bulgaria. This is produced by the use of tiers of colored stones and red bricks, which relieve any monotony in the building and offer an effect at once striking and not at all unpleasant. The upper colonnade of the cloisters is of wood with overhanging balconies.

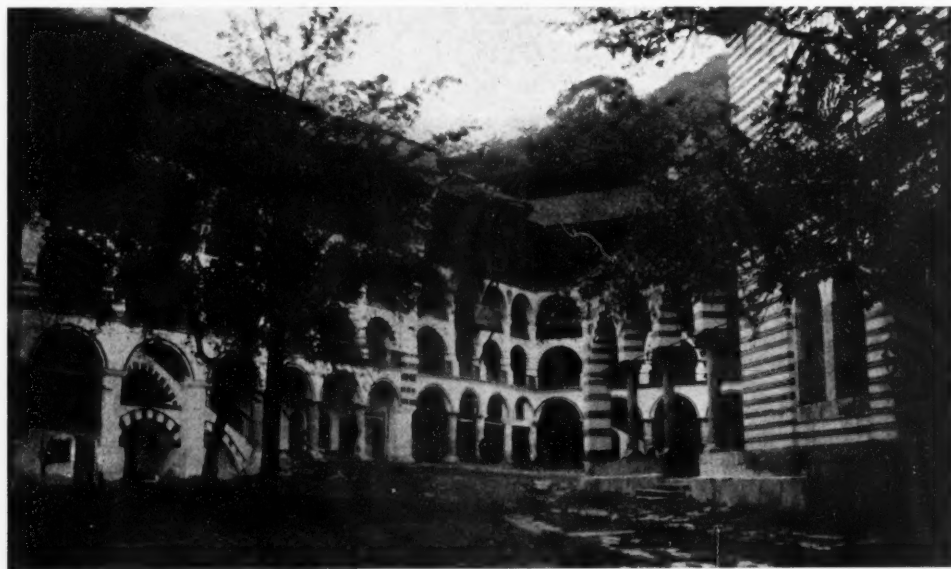
The library of the monastery is not very rich in manuscripts preceding the fourteenth century, but it has a good collection of later days. It also contains many very valuable documents, such as the decree of Tsar Ivan Shishman and many firmans from the various Sultans relating to the monastery. Among the wood-carvings which exist are some wooden doors from the fourteenth century and a throne of Khrelyo. It



AT THE GRAVE OF BOURCHIER, A LITTLE ABOVE THE MONASTERY.



THE CHURCH IS BUILT IN TRADITIONAL ORTHODOX FORM, WITH A CENTRAL DOME AND FOUR SMALLER ONES AT THE CORNERS.



A CORNER OF THE CLOISTERS, SHOWING THE STRIPED STYLE THAT IS SO POPULAR IN BULGARIA.

ART AND ARCHAEOLOGY

is worthy of considerable thought in regard to these works that, like some of the old silver preserved in the monastery, they show very clearly the mark of the old animal style of design which was known from the earliest days of the first Bulgarian Kingdom. The fondness for conventionalized animals and fantastic griffons and other beasts long continued as an important part of Bulgarian decorative art.

Nestling under the overhanging cliffs of the Rilo mountain, the monastery stands today as one of the finest examples of old Bulgarian art. It fortunately escaped serious damage during the World War, although within it is a tablet in memory of officers who

were killed near the spot in 1915. Beside it too, is buried the great English friend of Bulgaria, James Bouchier, who lived in the country for many years. His grave is a little above the Monastery and it looks down over the valley and buildings below. Around the old structure cluster the memories of history, the traditions of a people, the accomplishments of their art. No one who has any appreciation of the meaning of history or a sense of the beautiful can afford to miss a shrine which is in every sense national, patriotic and religious, one of those places where everything that is Bulgarian gathers and is developed.

THE HOUSE OF DIEGO COLON

(Concluded from Page 181)

his discoveries, when every petty country squire always remembered to place his over the entrance to his house. Nevertheless, the reason for this omission is perfectly comprehensible and in accord with the unfinished condition of the mansion. Don Diego wished to set his blazon, and probably that of his wife, on the wall of the upper stories—which he never constructed. Only in this way can the omission be justified.

The House of the Admiral is not a typical Castilian, Extremeñan or Andalucian edifice. I have spoken already of Italian influence. It lacks the severe expression of typically Spanish edifices. It is not austere, but gracefully simple, though studied. Its conjunction of lines is extremely harmonious, and what it lacks in spontaneity it gains in sober elegance. If all this appears in an unfinished house, what might not have been its effect had the edifice been completed?

Behind the house, as far as the wall by the river, spread a beautiful grove and garden

where vine and fruit tree imported from the metropolis must have flourished luxuriantly. Big and little ships anchored close to the house; a lovely little ogival postern in the wall, still to be seen, shows how access to them was had from the house. And in the distance the shimmering blue sea, which in those days floated the dark and slender canoes of the Caribs.

Such must have been the finest, as well as the largest, house erected during the sixteenth century in the Americas. None of the others, even including the famous viceroyal palaces in Peru and Mexico, could compare with it or equal it in monumental quality. Unfinished though it remains, it neither has nor ever had an equal. As for the history immured in its walls—what can one say! Enough that they make vivid the tale of those hot spirits who, bold as the Argonauts, gave all, even to their lives, to bring the denizens of the new world the rudiments of the arts.



A HEAD-HUNTING SCENE. THE FIGURES WERE ALL PAINTED RED. ONE HEAD-HUNTER AND ONE CAPTURED HEAD ARE REPRESENTED AS HAVING SLANT EYES. FOUR HEAD-HUNTERS ARE SHOWN WITH THEIR WEAPONS, THE CENTRAL FIGURE "BIG FEET" BEING SHOWN AS CARRYING BOTH A SPEAR AND A NOTCHED WAR CLUB.

INDIAN PICTURES IN ASHLEY AND DRY FORK VALLEYS, IN NORTHEASTERN UTAH

Photographs by Leo C. Thorne; Courtesy of the Laboratory of Anthropology, Santa Fe.

By ALBERT B. REAGAN

THE valleys of Ashley and Dry Fork are at the southeast foot of the Uintah Mountains, in northeastern Utah. Here the rocks are all pitched south and southeastward at angles ranging from low to almost vertical; and through the ridges thus formed these two streams have cut great gorges which time has widened. The two valleys unite about eight miles north-northwest of Vernal, and above their junction the valley of each is a wide-floored cañon, from a quarter of a mile to a mile in width,

which is generally enclosed in sheer walls 500 to 1,000 feet in height. Here, too, limestone ledges, red-bed ridges, and white cliffs are strongly flung to view in the dazzling sun. Comb-teeth, buttons, slim rocks, lazy buttes, knobs, monuments, isolated small mesas and ghost figures greet one on every hand.

On the rock walls of this region ancient man left hundreds of groups of rock-pictures which not only show considerable art in their make-up but are also more or less decipher-

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THE HEAD-HUNTERS ARE CARRYING LARGE HOOPS,
AND THE PUEBLO WOMAN HAS HER HAIR WHORLED
AS HOPI VIRGINS WEAR THEIR HAIR AT THE PRESENT
TIME.

able. Furthermore, through their being superimposed over each other and their being drawn in almost life size, the different cultures which occupied the region before the days of the present Utes can be readily determined, and then by placing these in their succession and correlating them with the house remains that dot the section, the age of these cultures can also be approximately estimated.

The Basket-Makers were the first people on the scene. They pictured themselves in square-shouldered (or slightly round-shouldered) drawings and as wearing their hair in side-bobs or side-locks, or as cut a little below the ears and occasionally held in place with a hair-band. Some of their other drawings are of animals and hunting

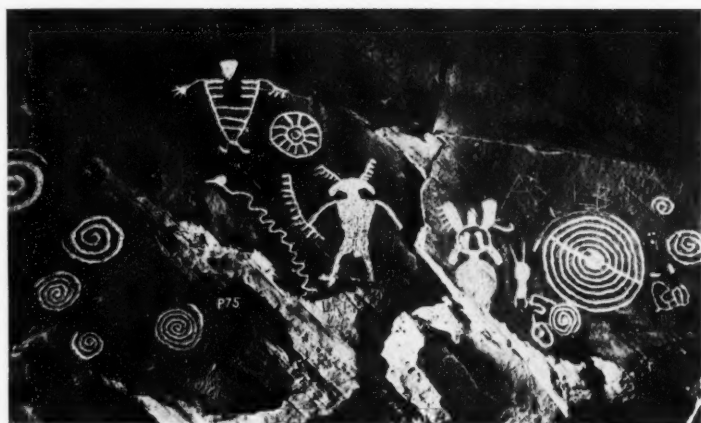
scenes, a fish trap (?), suns, zigzags, triangles, various trees, snakes, moons, stars, circles, concentric circles, spoked wheels and spirals. Strife is also occasionally shown, in the depicting of headless bodies and men being hurled from cliffs. However, the glyphs on the whole seem to represent days of peace in a land of plenteous game.

The rock-pictures do not give any hint as to the habitations of these people or what became of them. However, that they were followed by a Puebloan people is without question, as in places the Puebloan glyphs are placed over their pictures.

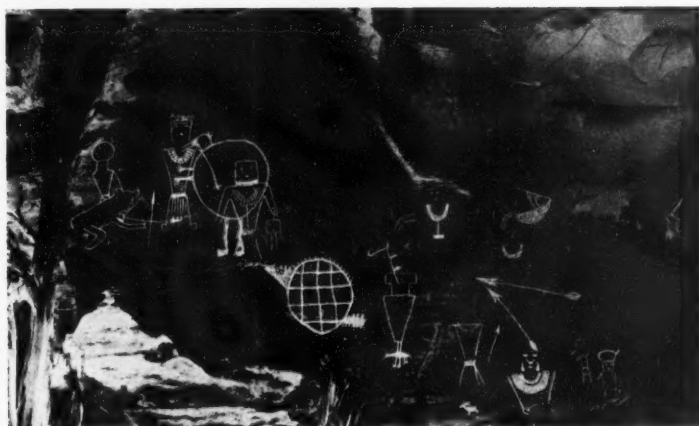
The Pueblos erected circular earth-lodge structures of the Willard (Utah) house type which in time graded into solid-walled, somewhat squarish houses and even into pueblos, both of which were built of earth or of undressed, river cobbles; while about these structures they erected many, and variously shaped, shrines. They also used a gray, smoothed, undecorated pottery which was very crude in make. They, too, left many petroglyphic groups to attest their having inhabited the region. Among these are men carrying the image of the horned (or plumed) rain-snake, *kachina* scenes, and women with whorled hair dressed as Hopi virgins now wear their hair.

These Pueblo peoples were peaceable and at no place do their petroglyphs portray any strife. Theirs seems to have been a happy land, where, judging from the glyphs they left, there was an abundance of game; and their irrigating ditches, which can still be traced, indicate that they had bountiful fields. Theirs for their day and time was a paradise. Then there came troubled times. Of these the records were left by their enemies, who depict themselves as bringing home the heads of the braves and as leading the women and children into captivity.

A people who patterned their drawings of human beings after the shape of their woven water-jugs and after the visible, round faces



A BASKET-MAKER SCENE.



A HEAD-HUNTING SCENE SUPERIMPOSED OVER A BEAR DANCE SCENE, OF THE ROUND-BODIED DRAWING PERIOD.



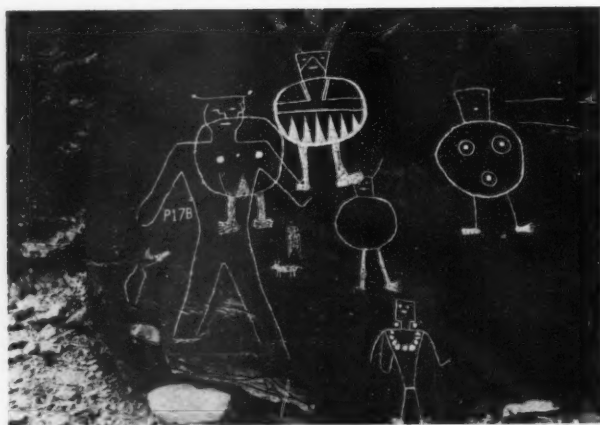
THE PAINTED DANCER AND THE BIRDS AND BEASTS.



A BRAVE IS CARRYING A HEAD AND ALSO DRAGGING A CAPTIVE ALONG WITH HIM. THE MIDDLE DRAWING IS A PERSON OF THE "HEAD-CARRYING" GROUP, SUPERIMPOSED OVER A ROUND-BODIED DRAWING.



A MAZE SCENE.



A SQUARE-SHOULDERED DRAWING OF A LARGE MAN IS SUPERIMPOSED OVER A CIRCULAR BODIED FIGURE. THE ROUND-BODIED DRAWINGS ARE OVER STILL OLDER DRAWINGS.

ART AND ARCHAEOLOGY

of the sun and moon, it would seem, were dwellers in a part of the region in a time interval in which the Puebloan peoples were not strong enough to drive them out. These, in turn, were followed by a people who will be considered under the name Head-Hunters, until a better name suggests itself.

them leading women and children into captivity, the heads probably being only trophies of war, as were scalps among many other American tribes. Among these captives are women who are depicted as wearing their hair in whorls in Hopi virgin style, thus showing, beyond doubt, that a part of



THE RETURN OF A WAR PARTY. THE MAN CUT OUT IN BAS-RELIEF IS PRESENTED DANGLINGLY AS IF DEAD. TWO HEADS ARE ALSO SHOWN IN THE DRAWING.

The rock-pictures of the head-hunting people are the most numerous in the region and at least a third of these are found drawn over the rock-writings of the three previous cultures, thus showing beyond question that they are the latest in the time scale. A third of their pictures show them returning from raids, bringing back with them the heads of the vanquished braves. Several also show

their captives were of the Puebloan stock of Indians. In nearly all the scenes they picture themselves as wearing elaborate head-ornaments and gaudy necklaces and gorgets, probably picturing themselves only in gala attire. This conclusion is borne out by the fact that many of the scenes depict hump-backed musicians playing their flutes.

(Concluded on Page 210)

FIFTEENTH CENTURY ENGLISH RECIPES FOR THE MAKING OF PIGMENTS

By J. R. CLEMENS

GEORGE SELWYN in a letter to Lord Carlisle marvelled at the freshness of the coloring of paintings by Lely and wondered if Sir Joshua Reynolds could explain why his (Reynolds') pigments were so inferior to the older artist's in effectiveness.* The above remark of Selwyn is responsible for research (touching recipes for the making of pigments by the old masters) reported in this paper that led back through the analytical laboratories of de Wild and of Laurie to synthesis itself in the so-called *Secret-Boeck* of the Dutch (A. D. 1609), and Cennino Cennini's treatise in Italian (1398). And then it was my good fortune to happen on recipes for the making of pigments in lovely fifteenth century English, with all its quaint charm in expressing measurements of length, e. g., "a good quoit's cast in length"; and of time, "the space of a credo" (i. e., the time it takes to say a credo); and "of a bow shot (i. e. arrow-flight)".

One of the *Secret Boeck's* recipes is for making black pigment: "Black from peach stones. If you would have a beautiful and good black then take a number of peach stones and put them in a new pot with a lid and seal it tight on top so that no vapor can pass out, otherwise the stones will be burnt completely to ash. Put the pot in a potter's oven and heat it as long as the unburned pot must be baked. When now it is burnt, then

* The actual words of George Selwyn in his criticism of Sir Joshua Reynolds are: "We have the same relations and his house was furnished with many of their pictures. There was one of a great-grandmother of mine, who was the Speaker's sister, painted by Sir P. Lely, that was one of the best portraits that I ever saw. I wish Sir J. Reynolds had been there to have told me why those colours were so fine and looked as if they were not dry, whilst all his [Reynolds'] are as lamb (sic) black in comparison of them." (Carlisle MS.)

take the black stones out. Pound them in a mortar and grind them afterwards on a stone" (Laurie).

Germane to the subject of this paper is an entry in Latin in the notebooks of Sir John Finch (c. 1660) on colors. He states that Carlo Dolce, the eminent painter, says that those who paint on unslaked lime (*calcem vivam*) or fresco, as they call it in Italy can not use the same variety of colors which those can who paint on wood or canvas; for by reason of the lime, those colors which have not their origin from the earth itself, undergo a change. Extract of lapis lazuli retains its cerulean color, but the white produced by white-lead is changed in a short time to a leaden color, and the pumice color produced by cinnabar in course of time becomes dull like quicksilver. All colors obtained from flowers or animals, such as crimson, always change. Painters use linseed oil and nut oil, not olive oil which never dries. They use nut oil with white, for with linseed oil the white lead turns yellow in a short time (Finch MS.)

It will be noticed that in the old English text Roman numerals are used throughout. It was not until early in the seventeenth century (A. D. 1612) that Arabic numerals began to be used; and the knowledge of this fact enables one to determine whether a MS. is of the seventeenth century or of an earlier date.

As bearing on the trustworthiness of these old recipes, the reader is reminded that Robert Burns, A. R. S. A., painted a picture in melted wax according to the directions of a recipe of Pliny. (See A. P. Laurie. *The Materials of the Painter's Craft*).

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(When Mr. Clemens sent in his manuscript, he had not transliterated the old symbols into modern figures and text. This made complete understanding of the subject matter difficult. As the spellings and some of the names of pigments in fifteenth century English added to the difficulty, the author consented to rearrange his matter in parallel columns, giving the original reading, with all its quaint spelling and curious symbols at the left, and a modern version at the right to facilitate a ready understanding of this fascinating subject.)

In the early fifteenth century the following were charges per hundred and per thousand for coloring letters in MSS:—"Small lettris blew and rede the C. $\dot{\text{f}}d.$, a $\text{m}^l \dot{\text{f}}d.$ Small lettris blew and rede florissid prec, $\text{c.} \dot{\text{f}}d.$, a $\text{m}^l \dot{\text{f}}d.$ Small lettris gold and blew florissid the $\text{c.} \text{m}^l \dot{\text{f}}d.$, a $\text{m}^l \dot{\text{f}}d.$ "

And here is a mine of curious lore of how they made pigments in mediaeval England:—"To mak brasyl water substancial in a crudde Tak brasil and shave it, and tak lyme water and seth it with and when it is so then and tane fro the fyre put a lump of alum in its als thu doist of yelowe. To dry brasil water when it is cruddid to be substancial for alumpnars or steynars. Take when brasil water is cruddid as be for is sayde and set it doune in a dyshe. Then tak a wollen cloth and wete it alle over in water and tak that cloute and ley it over the dysche with brasyl and under set the dysch on a syde that the colour ma drawe to the syde of the dysch and then xal the cloute drawe out the clene water and the rosette colour xal ay be dray- and and ay under sett the dysch litelle and lytelle with a stone or a stykke that all the colour ma drawe to the syde downward and when that colour is dried tak it out and wyrk it forth. And so do of fustyk.

"Vermyloun ma be tempered with yellow for a colour. To mak dorre tak fustyk and seth as be for is sayd of brasylle.

"To mak swerte colour.—tak sude and temper it with gum water.

"For to floresshe with gold on colors or on parchment:—Tak the juste of garleke and gumme water so that the garleke juste be the more porcyon, blynde them to gether and wryke ther with, and if it be to thyck putte a lytelle cleyn water and if it to dry after it be layde on then blo thereon with thi mowthe and ley thi golde lyke sysse thu may wryke with.

In the early fifteenth century the following were the charges per hundred and per thousand for coloring letters in MSS:— Small letters, blue and red, 1d the hundred; 6d the thousand. Small letters, blue and red, heightened, 2d the hundred; 9d the thousand. Small letters, gold and blue, heightened, 4d the hundred; 12d the thousand.

And here is a mine of curious lore of how they made pigments in mediaeval England:—"To make Brazil water substancial in a curd:— Take Brazil wood and shave it, and take lime water and boil with it and when it is boiled and taken from the fire put a lump of alum in it as thou dost of yellow. To dry Brazil water when it is curded to be suitable for illuminators and colorists:— Take when Brazil water is curded as beforesaid and put it in a dish. Then take a woollen cloth and wet it thoroughly in water and take that clout and lay it over the dish with Brazil and tilt the dish on a side that the color may draw to the side of the dish and then will the clout draw out the clean water and the rosette color will all be drained and keep undersetting the dish, little by little, with a stone or a stick that all the color may draw to the side downward and when that color is dried take it out and work it. And so do of fustic.

Vermilion may be tempered with yellow for a color. To make golden yellow, take fustic and boil it as before is said of Brazil water.

To make tawny color:— Take soot and temper it with gum water.

To make flourishes (in illuminating books) with gold on colors or on parchment:— Take the juice of garlic and gum water taking care the garlic juice be the greater portion, mix them together and work therewith, and if it be too thick add a little clean water and if it be too dry after it be laid on blow thereon with thy mouth and apply the gold like size thou mayest work with.

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To ley golde on cuppes of horne glass or ston:— Fyrst take gleyr of egges welle shorted and resolve gumme armonyache ther in and with a penselle wete therin and make on the cuppe watt thu wylt ther with and son efter wyle it is greyn and clammy cowche apon thi gold and when it is dry if thu wylt thu may grave in it letters or flowers with a malle thyng of yrun or brasse.

To make curyus worke on glasse wyndosse after the be aneled:— Tak colours tempered with peynters oylle fynely and ley them on thi glasse ther as thulyst with thi pynselle. Loke what the color is and the same wylle the glass seyme. Best is to wryke this in Somer, but thu may do it in wynter for nede.

To do sylver on yrun:—Fyrst loke that thi swerde or knyffe or what so ever it be that it be asmoother and as cleyn as thu can make it. Then take okur, blacke plumme, redde plumbe, vertegresse but most of the black plumme. Then knocke alle thes to gether with oylle and vernysse but of vernysse most by the forte parte the oylle and after ley thi yrun over with this syse and lett hyt drye in the son. And when it is clammy dry let thereon the sylver foyle. Then take gumme dragantam and ley it in water to stepe and it will then swelle, Take that gumme and melte it by itself over the fyre and alle hot lay on the swyrde or yrun and the shalle see the oylle swete owt anon. And then sett him owt in the sonne to dry and then wyle he dryeth rubbe on hyt with thi fynger tyll thu see the oylle rubbed owt or swett owt. Then tak a lynyn clothe and with small sonde skorre to the gumme be a way and it wylle seme sylver.

To make turnesolle (a violet-blue or purple coloring matter, obtained from the plant *Crotophora tinctoria*—the "whede flowers" of this recipe—formerly much used for coloring jellies, confectionery, wines and later as a pigment):— Take a pottelle of gud red wyne and iij owunces of brassel and a nowunce of whede flowres and an nowunce of ceruse, and put alle these thynges together to the wyne and sethe them to gether

To lay gold on cups of horn, glass or of stone:— First take whites of eggs well shorted and dissolve gum ammoniac therein and with a pencil wet therein and make on the cup what thou wilt therewith and soon after while it is fresh and clammy lay on the gold and when it is dry if thou wilt thou mayst engrave on it letters or flowers with a small thing of iron or brass.

To make curious work on glass windows after they be annealed:— Take colors tempered with painter's oil finely and lay them on the glass there as thou list with thy pencil. Look what the color is and the same will the glass seem. Best it is to work this in Summer but thou mayst do it in winter in a pinch.

To lay silver on iron:— First see that the sword or knife or whatsoever it be is as smooth and clean as thou canst make it. Then take ochre, black lead, red lead, verdigris, but most of the black lead. Then pound all these together with oil and varnish but of varnish most by the fourth part the oil and after cover the iron over with this size and let it dry in the sun, and when it is clammy-dry put thereon the silver foil. Then take gum tragacanth and put it in water to soak and it will then swell. Take that gum and melt it by itself over the fire and all hot lay on the sword or iron and thou shalt see the oil sweat out presently. And then set it out in the sun to dry and then while it drieth rub on it with thy finger till thou seeest the oil rubbed out or sweat out. Then take a linen cloth and with fine sand scour it till the gum be rubbed away and it will seem silver.

To make Turnesolle:— Take a measure of two quarts of good red wine and three ounces of Brazil wood and an ounce of whede flowers and an ounce of white lead and put all these with the wine and boil them together till the wine be boiled half away. Then take fair linen cloth that is old and washed clean and put it in the wine and dip it well therein and then wring it out a little

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tylle the wyne be soden halfe a way. Then take fayre lynnyn clothe that is olde and cleyn wasshen and putt them into the wyne and dyppe it well therin and then wrynge it uppe a lyttle and then henge it to dry in a place from sone or wynde and so make as many clothes as thu wylte tylle thi matter be done. And when the clothe is drye folde it up and ley it owt of the eyre or elles it wylle turne owt of blew into red.

To mak a musyke :— Take a vesselle of glasse that wylle holde a quart and take red cley and temper it with horsedonge and dowbe therewith thi vesselle more than halfe anynche thicke but lett in the mowthe as mych as thu may put there in thi lyttle fynger. Then take a nowunce of armonyak an nowunce of whyte brymm ston and a nowunce of quycke sylver and a nowunce of tynne, and fryst melt thi tynne in a godert or vesselle and when it is molten putte thi quicke silver into the godderd on the fyre and soddenly stop the mowth of thi vesselle with a handfule of greyn gresse that the quycke sylver leppe not owt and sone then take besyde the frye and lett them kele and then thu may crympulle them betweyn thi fyngers. Then take alle thi iiij matters and grynde them on a ston to gether and then putt into the vesselle to gether and stoppe well the mowthe save the lyttle holle, and after honge thi vesselle over thi fyre the mountenans of ij owres tylle thu see no brethe cum owt of the vyalle over the fyre. And fyrst thu must make an esy fyre and after worde more and more and alle way bloe the fyre tylle the glasse have lost brethyng and then take hyt a way and breke hyt and looke what thu fyndest ther in.

To mak sylver :— Tak a quantyte of fine coper as mych as thu wulte and do it in a pott of yerth that is made therfore and melte it therin and when thi mettele is gloyng hote then cast a lyttle powder of calamyn and of argoyl and of comyn salte an a and of orpement as mych as of the other and that the made in fyne powder and castor lyttle

and hang it to dry in a place from sun and wind and so make as many cloths as thou wilt till the liquid be used up. And when the cloth is dry fold it up and lay away from the air or else it will turn from blue to red.

To make a surprise :— Take a vessel of glass that will hold a quart and take red clay and temper it with horse dung and daub therewith the vessel more than half an inch thick but put in the mouth as much as thou canst put therein [on] thy little finger. Then take an ounce of gum ammoniac and an ounce of white brimstone and an ounce of quicksilver and an ounce of tin, and first melt the tin in a goblet or vessel and when it is melted put the quicksilver into the goblet on the fire and suddenly stop the mouth of the vessel with a handful of fresh grease that the quicksilver leap not out and soon then take from the fire and let cool and then thou mayst crumble them between thy fingers. Then take all the four substances and grind them on a stone together and then put into the vessel together and stop well the mouth save the little hole and afterwards hang the vessel over the fire for the amount of two hours till thou observest no steam come out of the vessel over the fire. And first thou must make a slow fire and afterwards more and more and always blow the fire till the glass has stopped steaming and then take it away and break it and look what thou findest therein.

To make silver :—Take a quantity of fine copper as much as thou wilt and put it in a pot of earth that is made for it and melt it therein and when the metal is glowing hot then mix a little powder of the herb called calamyn (a species of aromatic herb called *Calamenta balsamita*) and of dregs of wine and of common salt and of King's yellow as much as of the other and that be made into fine powder and add a little of this powder to the copper and stir it well in every direction with a stick and then there will arise above the metal as it were a scum and then blow

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of this powder to the coper and styre hyt welle alle way wyth a stycke and then ther wylle a ryse a boffe thi metal as it were a hath and then bloo welle thereon and styrrre hyt wel algate tylle hyt wax alle clere and then wille it is hote cast therin verives made of crabbes and after botter it and fele it for it be thyn and of melte hyt a geyn and cast more powder and dygh it in the same manner iij or iv tymes and ych tyme quenche it welle in vericog and a veylle it and bater hyt as thu dyd byfore and do this oft tylle it be fyne ynoghe and do it in a pott of yerthe with argeylle salt and bynegur or asyelle or leys of wyne and bule it well therin aforlongway and then thu shall have ther of fyne sylver as all manner a sey bothe for to gylt and to batyr.

(MS. Reginald Rawdon Hastings. 417-432).

well thereon and stir in all directions till it become all clear and then while it is hot cast therein verjuice made of crabs and afterwards beat and stir till it be thin and then melt it again and add more powder and prepare it in the same manner three or four times and each time cool it well in verjuice and always beat and stir it as thou didst before and do this till it be fine enough and do it in a pot of earth with dregs of wine salt and vinegar or asyelle (a kind of vinegar or lees of wine and boil it well therein for a long time and then thou shalt have there of fine silver of all manner of assay both for to gild and to chase.

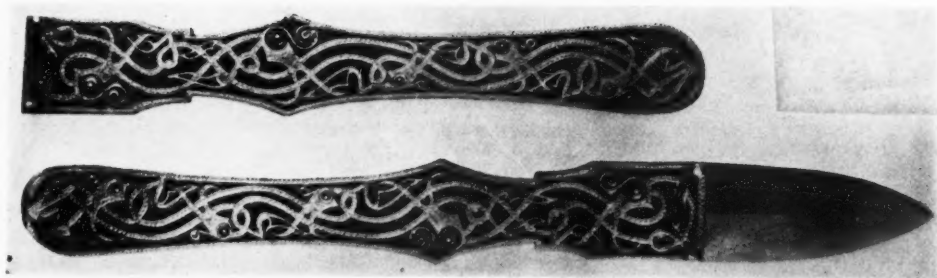
INDIAN PICTURES IN NORTHEASTERN UTAH

(Concluded from Page 205)

It need not be astounding that the pictures show these people as returning from victorious raids with the heads of their vanquished foes. In Bulletin 78, of the Bureau of American Ethnology, Kroeber gives several instances in which war parties took heads instead of scalps. One instance he cites was that of the Juaneño (p. 647) who, he says, showed no quarter in war. Any wounded who could be seized were decapitated. Another was that of the Mohave when at war. Kroeber states (p. 751) that the conflict often ceased when one or two of the enemy had been slain and their heads secured as trophies to be scalped at leisure. In writing of warfare throughout California in general (p. 844), he further states: "A fallen foe that could not be operated upon

in safety and leisure was almost always decapitated and the head brought home."

The purpose of the rock-writings in this region, especially those of the head-hunting group, has puzzled the various investigators; for though they appear to be in a sense narrative, each glyph probably representing a narrative incident—that is, the glyph would call up some event with its various details—there is not enough uniformity to indicate that each character stands for a definite idea wherever placed. On the other hand, they do depict scenes and most of them probably do record events in the lives of the principal actors. The other glyphs, for the most part, are apparently explanations of myths and the recording of conspicuous events.



THE HANDLE OF A HORSE'S REIN MADE INTO A PAPER-KNIFE. VIKING ART IN ITS HIGHEST FORM, XTH CENTURY. GILT BRONZE STUDDED WITH GARNETS.

THE JEWELS OF THULE

By MAURICE DUNLAP

She was a large woman of middle age with one piece of jewelry, a large brooch, gleaming on her gown. In that worldly crowd gathered in the *Gripsholm's* smoking-room she seemed simply, even plainly clad, yet the eye of the Seeker-after-Art caught the gleam of the brooch, noted its workmanship and asked to be introduced to the wearer.

"Yes," she explained, as they drank their coffee together, "this is an old design. Viking women wore just such pins a thousand years ago."

Her face lighted up as she spoke; her blue eyes sparkled. The Seeker-after-Art had thought her plain, rather a heavy type, but now—. "A Viking pin," he mused, examining the ornament. "It seems made for you."

"It *was* made for me," she replied. "I selected the design myself and had it made in dull silver rather than in gold or bronze." After a moment's pause she added: "We think in Sweden that jewelry should somehow reflect something of the wearer."

The Seeker had seen quite a display of jewelry on shipboard. The ladies of the first cabin had not neglected such an oppor-

tunity for showing the extent and variety of their adornment. Two blondes at the next table had necklaces and eardrops to match their gowns, supplemented in one case by a freakish ring. Just beyond sat a matron whose bosom shimmered like a Christmas tree. The Seeker's eyes wandered gratefully back to the simple brooch.

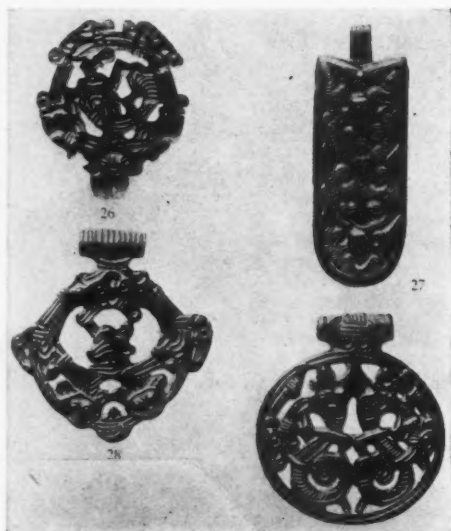
"We think in Sweden that jewelry should be sparingly worn" remarked his companion with a smile. Now the Seeker noted that the lady had both dignity and grace. In fact, no one in the cabin seemed quite so distinguished looking as she. And it was the brooch that had led to this discovery.

"Who makes this jewelry?" he asked suddenly.

"Professor Herman Bergman," was the answer. "His work in metals is known throughout our Northland; he casts the statues of Carl Milles."

Less than a week later the Seeker found a shop in Stockholm where the mentioned jewelry was on display. What a discovery! In this day of worship of the new here was a bold featuring of the old and—strange as it sounds—this jewelry satisfied a craving for the bizarre just because it was antique and

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GOLD-PLATED PENDANTS TO VIKING BELT. NOW USED INDIVIDUALLY IN A CHAIN; EFFECTIVE IN DULL SILVER.

fine. It was also the expression of something national, in contrast to the international attitude which art so often now assumes, submerging distinctive features to cater to some world-fad.

Viking jewelry—there it lay glistening in row on row, pleasing the eye with its dull, rich coloring and stirring the imagination with its design. His eye rested on a brooch similar to the one his companion on ship-board had worn.

"Is that really an ancient pin?" he asked.

"No" answered the saleswoman. "But it is a copy of an original found in a grave a thousand years old." She glanced at a list which lay on the counter. "That model came from the province of Blekinge. The dragon motif you see is more developed than on pins of earlier date."

The Seeker held the ornament in his hand. "This seems to be bronze," he mused. "I've seen a similar one in silver."

"We'll make you one in silver if you like—or in gold," was the obliging answer. "The Vikings used all three metals."

"I'll not decide quite yet." The Seeker-after-Art had already observed other treasures. "Now here is an odd beast—an earlier model, I suppose?" The figure seemed to be that of a dragon with head turned toward a sword.

"On the contrary," replied the girl, referring to her list, "That is a Christian symbol. It represents the Lamb of God with a cross and was found on the isle of Öland in a XIIth century grave. "But here,"—she picked out another—"is one from the same island 600 years older, and this one is still older—from about 300 A. D." The Seeker gasped at the casual manner in which she handled the centuries. Art in Scandinavia had an historic, nay, even prehistoric, background.

Not all the objects in the case were pins. One resembled a necklace with elaborate pendants.



A VALKYRIA BREAST-PIN, XTH CENTURY. COPY NOW MOUNTED ON ONYX BLOCK AND SOLD AS A PAPERWEIGHT.

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"The necklace of Freya?" inquired the Seeker, recalling the jewelry described in an ancient lay.

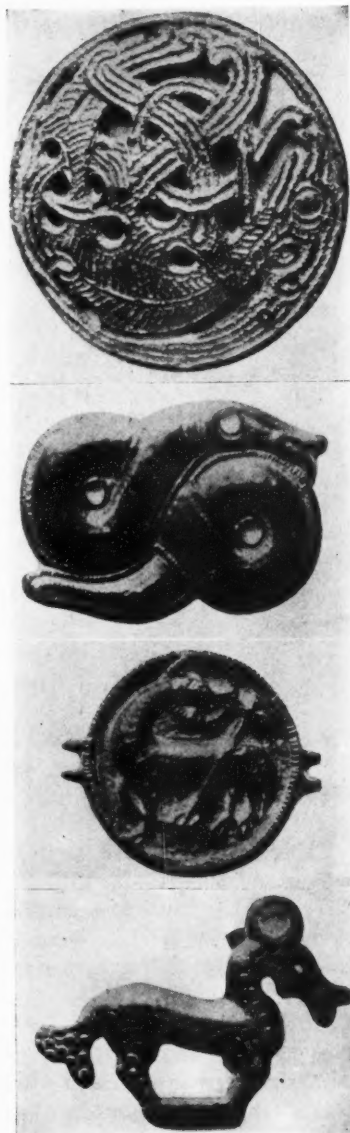
"A goddess *might* have borne it," agreed the saleswoman. "A modern lady hardly could. It is really a belt and we sell it piece by piece for buckle or brooch."

"This looks like a paper-knife. Did the Vikings have such things?" The girl was evidently amused.

"The originals," she explained, "were handles to horses' reins. Isn't this a beautiful design? The dragons' heads and bodies are so intertwined. It was worked in gold-plated silver with garnets for eyes. Dr. Bergman has adapted it to more practical use."

The Seeker tried to visualize the proud users of reins with such handles. Perhaps they were like the haughty kings and queens arranged on a nearby chessboard—a most unusual chessboard, he thought. All the figures were distinct Nordic types done in Swedish *tenn*. The saleswoman was calling his attention to another ornament—two serpents' heads made into a belt clasp. "This has also been modelled from rein-handles," she remarked. "Seventh century. Yes, Viking horses had fine equipment, too. Larger gold pieces from saddles and harness can be seen at the Museum."

Museums are such stupefying things that the layman often avoids them, but the Seeker-after-Art had an inspiration and the following day sought the treasure-house of Sweden's past. Here he found jewelry unique of its kind and on a scale no modern shop could imitate. This was the adornment of the folk of *ultima Thule*, that dark and mysterious "land of barbarians" scorned by Greeks and Romans. Yet the latter hired warriors of Thule to defend sinking empires, and these returned to the Northland bringing gold. Rome fell, but much of its gold was refashioned into jewelry of new



1. BRONZE BUCKLE OF VIKING AGE, NOW USED AS A PIN, SHOWING THE DRAGON MOTIF AT ITS BEST.
2. THE DRAGON MOTIF TAKES FORM. VIIth CENTURY.
3. JEWELRY OF XIIth CENTURY SHOWS TRACES OF CHRISTIAN FAITH.
4. A PRE-VIKING BUCKLE; IVth CENTURY.

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SERPENT HEAD ADAPTED TO BELT BUCKLE. ORIGINALLY ON HARNESS OF VIIITH CENTURY. GILT BRONZE INLAID WITH GARNETS.

design. The Vikings decked their temple gods with it and buried it with their dead. Today, recovered treasure bears witness to the pagan culture of Thule. Those were strong men, and their feeling for beauty was strong. Behold their art.

In Professor Bergman's shop are two raven pins, copies of models at the museum. They recall that verse in the *Edda* where the All-Father speaks of his favorite birds which symbolised Thought and Memory and flew out over the world to gather news.

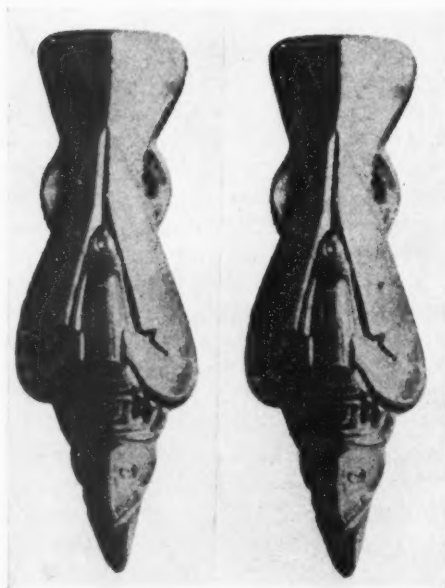
"I grieve for Hugin lest he fail to return," says Odin, "but more I fear for Munin."

Vikings fastened their tunics with raven pins and Hugin and Munin may still be worn

today by anyone who fancies them.

To see this jewelry displayed in all its glory, the Seeker-after-Art attended an opera; *Arniot* with its stirring music by Peterson-Berger has been revived in Stockholm and in its renewed form gives vividly the details of the Viking age. In the opening scene bejeweled women assemble to deck a temple. One Valkyria wore a mighty pin, the like of which Bergman has transformed into a paperweight. But the pin actually attained a quality of lightness on that heaving bosom. The men, too, lent a glory to their armrings, headgear and massive collars of gold—exact copies of originals. But these are not reproduced by Bergman, for no one could be found to bear them.

Recently the Seeker called at the Professor's shop to see his latest work. The Professor's blue-gray eyes sparkled with a kindly welcome. He showed the visitor into a



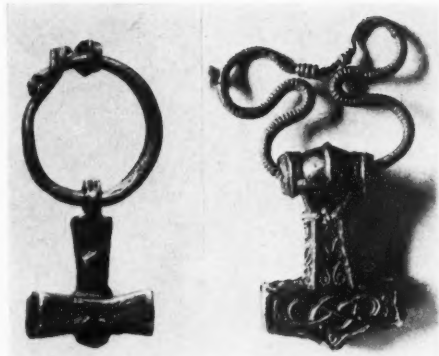
ODIN'S RAVENS IN PIN FORM, VIIITH CENTURY. HUGIN AND MUNIN REPRESENT THOUGHT AND MEMORY.

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courtyard through an unpretentious gate. Picturesque disorder reigned. Strange moulds and figures were piled here and there; the clang of hammers was heard. The Professor led his guest across the open space into a hall where swarthy men were welding plates of bronze. This was a creation of Milles, soon to be forwarded to Cranbrook, where the sculptor now has his abode.

Apprentices were filling moulds with fine sand. Dr. Bergman explained the process. Clad in a long smock and skull-cap he moved among them, a presiding genius—or is this the master-smith of the sagas, maker of Brunhild's ring and Beowulf's coat of mail? He led onward to a darker room. Through the smoky air came the glow of a furnace. Receptacles by the wall suggested that this was perhaps the retreat of Dr. Faustus. A magician indeed!

Then, in a quaint office-room looking out on the street, the latest reproduction of old jewelry was shown. The master-smith laid two bright objects on his desk. They looked like toy hammers made into pendants. Such indeed they are. Vikings wore these charms on chains around their necks in honor of the war god Thor. When the White Christ replaced the older god, the latter's symbol was



Courtesy of Royal National Museum of Sweden.

(LEFT) THOR'S HAMMER IN A SILVER PENDANT. WORN TODAY AS A THOUSAND YEARS AGO. SUPPOSED TO HAVE MAGIC POWERS PROTECTING THE WEARER FROM HARM.

(RIGHT) THE LATEST REVIVAL OF ANCIENT SCANDINAVIAN ART. THOR'S HAMMER IN SILVER.

laid aside and the cross became the popular sign. But is not the emblem of Thor as effective as that of Christ? One need not deny the power of the Cross in stressing the hammer's might, and perhaps Thor's is the better symbol for Scandinavia's pagan soul. Today, after a thousand years, the old charm may be worn again. Bergman's art hints of a Northland which, like the Viking Arnliot, still believes in strength.





THE WITTEKIND CHURCH WITH THE CHOIR SECTION WHICH FORMS THE REMAINING PART OF THE ORIGINAL CHURCH.

NOTES AND COMMENTS

THE HEATHEN WHO BECAME A SAINT

Only a few miles from Bielefeld or Herford lies the small city of Enger—beautiful and almost unknown. Yet this small Westphalian town was the scene of epoch-making events of early German history, and the residence of the Saxon leader Wittikind (or Widukind), a great heathen who became a great Christian, and his bones rest in the little Enger church.

In many bloody battles, covering a decade and a half, Wittikind defended his land against Charlemagne and the new God of the Frankish monarch. In 785 he abandoned the unequal struggle and was baptized as a Christian, with Charlemagne himself as godfather. Wittikind's castle was razed in 1305 by the Bishop of Paderborn. The church in Enger, a sturdy building dating from the days of the transition from late Romanesque to the Gothic, has three gables. At the back of its richly carved altar is a tall sarcophagus whose stone cover bears a relief sculpture of the Saxon leader, who died in 807. The life-size figure is clothed in a long robe. The beardless face has a noble expression. The head bears a crown, the left hand, hidden under a fold of the robe, holds the scepter, and

the right hand is raised as in blessing. Both crown and robe have a number of depressions which formerly held gems. Only traces of the original coloring remain.

Across from the sarcophagus, in a shrine let into the wall and covered with glass, repose Wittikind's bones, including a considerable part of the top of the skull.

Wittikind's memory is preserved in Enger through the *Timpenfest*, an ancient custom. At midnight on January 5, the legendary anniversary of his death, the church bells are tolled, and also before and following divine services on the next day, as is done when a coffin is lowered into the grave. The church services consist of a conversation between the pastor and the children of Enger about Wittikind, and when it is over the children receive *Timpen*, or rolls, and bread and sausage are distributed to the city's poor. This custom has been observed since time immemorial, and tradition has it that it was instituted by the great Christian convert himself. For the preservation of the custom King Friedrich Wilhelm IV established in 1842 a fund of 1,000 thalers. The inflation following the World War wiped it out, and the bread and sausages are now paid for by freewill offerings.

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THE ROARING HEADS; SAXON GATE GUARDS WHICH HAD BEEN AT THE ENTRANCE TO WITTEKIND'S CASTLE. THEY OPENED THEIR MOUTHS WITH THEIR HANDS AND CALLED OUT THE SAXON WARNING YELL "TODATE" (LOOK OUT!)

Novel is the fact that the church tower stands by itself at the side of the church. A legend has it that Wittikind ordered two churches built, one in Enger and one in Schildesche, not far away, and promised that his bones should rest in the one that was completed first. The sly Enger citizens built their church without a tower, and thus won the race. Later they erected the tower beside the church and placed on one side the head of a Moor who had suggested the trick. As a matter of fact, however, the manner in which the tower was erected was undoubtedly in pursuance of a rule laid down by St. Benedict, and the head represents the Moorish Saint Maurice or Mauritius, whose relics are kept in it.

Several charming paths lead from Enger to Schildesche, whence a street car line leads to Bielefeld. Beyond the Enger hill lies level land, with farmhouses scattered over it, all under the shade of mighty oaks. The taciturn, earnest inhabitants are all descendants of Wittikind's *Sattelmeier*, that is, soldier-farmers who had the right to keep a tax-free horse. They all still bear the name Meier, and enjoy special rights. Their dead are carried on a wagon drawn by six horses, the knell is rung during "the king's hour", and the coffins are set in the church choir before being taken to the grave. A saddled horse is led behind the wagon with the dead, as in the days of Wittikind.

Legend has it that Wittikind is asleep in the Babilonie, a hill near the Weser. And on moonlit nights the peasants sometimes still see him, mounted on a white horse, galloping toward Enger.

QUEEN'S BED REPLICA IN BOSTON MUSEUM

A reproduction of the famous portable bed-chamber of Queen Hetep-Heres I, mother of Cheops, is eventually to be installed in the Boston Museum of Fine Arts as a study exhibit in the Egyptian Department. The first unit of this group to be received at Boston is a reproduction of the sloping bed of the Queen, which is now exhibited in the New Accessions Gallery.

This furniture, celebrated as the earliest known royal furniture of ancient Egypt yet found, was discovered in 1927 by the Harvard University-Museum of Fine Arts Expedition in Egypt. In addition to the bed, the group includes a carrying chair, an arm chair, jewel box, and other objects all cased in gold, used by the Queen during her lifetime and buried in her tomb at Giza some five thousand years ago.

A CORRECTION

Through an unfortunate transposition, the captions of two illustrations in the last issue of ART AND ARCHAEOLOGY were made to convey a wrong impression. In Professor Coleman's article on the wooden churches of Ruthenia, the inscription under the illustration on page 139 should have been "The Boykish Church at Uzhok", and that under the picture on page 141, "The Second Church at Jasina with Vestibule". ART AND ARCHAEOLOGY tenders its apologies to Mr. Coleman for the mistake, which occurred after the proofs had been read.



THE STONE COVER OF THE SARCOPHAGUS BEARS A RELIEF SCULPTURE OF THE SAXON LEADER.

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CHRYSTUS AND MARY, BY EDWARD ANTHONY.

THE CURRENT IVORY SOAP SCULPTURE AWARDS

Awards in the Ninth Annual Competition for Small Sculptures in White Soap were made June 6 at ceremonies marking the opening of this year's annual soap sculpture exhibition at the National Alliance of Art and Industry, 65 East 56th Street, New York. The prizes, offered by the Procter & Gamble Company and amounting to more than \$1,000, and two special awards by leading industrial firms, were announced by Alon Bement, director, National Alliance of Art and Industry, and a member of the Jury of Award for the competition.

A special feature of the exhibit is a bust of President Roosevelt carved in soap by Miss Juanita Leonard, professional sculptor and for two years director of the Soap Sculpture School. In all, two thousand sculptures from every section of the United States and from many foreign countries were on view.

Tom Robertson of Philadelphia was awarded the first prize of \$150 in the Professional class for his striking sculpture, *Torso*.

Edward Anthony of Wyandotte, Mich., whose sculpture *Christus and Mary* was awarded the second prize in the Advanced Amateur class, was cited by the judges as an example of a sculptor whose artistic talent has been fostered through the use of soap as a medium for sculpture. This young sculptor has, in

the opinion of the judges, shown remarkable development since, several years ago, he was awarded a special scholarship to an art school as the result of an entry in the Senior class of that year's competition.

To Ellen Bezaz of Brooklyn, N. Y., winner of both a first prize and the Lenox Award in the 1932 competition, goes the signal distinction of repeating her double triumph. Her sculpture *Spring* was awarded third prize in the Professional class, while another soap carving, *Mohammedan Beggar*, carried off the award made by Lenox Incorporated, Trenton, N. J., for the sculpture best suited to reproduction in pottery.

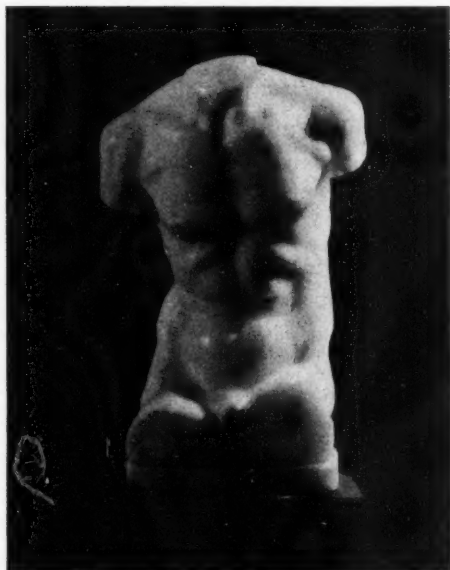
HARVARD EXCHANGES ANTIQUITIES WITH SPAIN

A special dispatch to the *New York Times* from Cambridge, Mass., reports that negotiations between the Fogg Art Museum of Harvard University and the Spanish Government have resulted in an important exchange of antiquities satisfactory to both groups. The Fogg Museum, by this agreement, returns to Spain the noted tomb of Don Alfonso, son of Count Pedro de Ansures and tutor and adviser of King Alfonso VI. The sarcophagus dates from the period between 1093 and 1131, and is generally known as the "Sahagun tomb". It is one of the most valued of all mediaeval mortuary monuments of a sculptured type. In exchange the Spanish Government has offered the Fogg Museum a collection of archaeological objects of great value. Among them are a marble column from the Benedictine Monastery of San Pablo de Santiago, a double capital from a Valencian monastery, of the thirteenth century, and a considerable number of ceramics of great importance.



PROFILE, BY W. HASKELL.

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TORSO, BY TOM ROBERTSON.

"WHERE IS TROY?"

The revival of interest in Troy during the past year and the feeling of uncertainty in many quarters that the Tell of Hissarlik could have been the site of the Homeric city, has impelled ART AND ARCHAEOLOGY to ask the distinguished French archaeologist, Dr. Charles Vellay, who is the Editor of *L'Acropole* and the *Revue des Etudes Homériques*, to discuss the matter at length, and reopen the whole question. Dr. Vellay has courteously agreed to do this, and it is hoped that his article "Where Is Troy?" will be ready for publication in the November-December issue of ART AND ARCHAEOLOGY. All students are urged to watch for this contribution because of its unusual interest and importance.

In the consideration of so difficult a subject, Dr. Vellay has written the Editor: "The question of method is extremely important, and first of all it seems necessary to dispose of the negative side. When after having taken account of all the historic and philological testimony, of all the topographical arguments, and finally of all the considerations of an archaeological nature, the impossibility of the Hissarlik hypothesis will be perfectly evident. Then only, the second part of the problem can be developed. This will consist of seeking out by the same methods—philological, topographical and archaeological—the true emplacement of Homeric Troy.

"Without wishing to enter prematurely into the question, it seems to me that the site of Hissarlik is not the only one in the Plain of Troy which may be questioned to possess the characteristics of a pre-Mycenean or Mycenean site. Further, if one wishes to admit that a Mycenean town was at Hissarlik, it must be evident that there existed in the topographical

radius of the Plain other contemporaneous towns. What are they, and where are they? By a comparison of the emplacement and of the superficies, anyone may determine for himself whether one or another of these sites is more in conformity with Homer than is Hissarlik."

Since the foregoing was written, a newspaper dispatch by United Press reports from Istanbul, Turkey, that Professor Blegen's expedition, which is again in the Trojan field, announces the discovery of primitive houses and ceramics in the "first level" of the disputed city. The finds are stated to date the community back to about 3,500 B. C.

PHILADELPHIA'S OPEN-AIR SCULPTURE EXHIBIT

As usual for several years past, the city of Philadelphia is enjoying its annual exhibit of sculpture, this time placed in the courts and gardens of the Art Museum under the joint auspices of the Fairmont Park Association, the Art Alliance and the Art Museum. International in scope, the exhibit includes works by Maillol, Carl Milles, Mestrovic and Despiau, as well as by many of the foremost American sculptors. The exhibit was arranged with the object of assembling representative works by contemporary artists as a guide to the committee charged with selecting sculptors to execute works for the Ellen Phillips Samuel Memorial. ART AND ARCHAEOLOGY hopes to be able to use illustrations in the September-October issue showing several of the outstanding pieces.

"THE LATEST ARCHAEOLOGICAL DISCOVERIES IN ITALY"

Under this title, the Italian State Railroads have recently issued in English an exceedingly handsome and well illustrated brochure of convenient size, containing many illustrations and more than an hundred pages. While it is obviously impossible for anyone to keep pace with the astonishing archaeological work being done day by day by the Government unless one reads the Italian newspapers and technical publications, this little book is valuable because of its comprehensiveness and the idea it gives of recent discoveries. The foreword says:



MOHAMMEDAN BEGGAR, BY ELLEN BEZAZ.

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WITTEKIND'S SARCOPHAGUS, WITH A GOLDEN BACK-WALL, CONTAINS THE BONES OF THE SAXON LEADER.

"This book is neither a guide nor an archaeological index of the excavations and ancient monuments that abound in Italy. Instead it is meant to serve as an archaeological supplement to all ordinary guide books, since, by adding to them the new discoveries made during the last ten or twelve years and thus supplying up-to-date information otherwise unavailable, tourists may be induced to visit the new excavations and monuments outside the traditional beaten track. Lack of space compels us to leave out archaeological museums, in spite of the fact that existing collections have been considerably added to and, in some recent cases, completely reorganized, while new ones have been put together and opened to the public. Similarly, no mention is made of excavations and restorations connected with Palaeo-Christian and Byzantine antiquities although they certainly deserve to be illustrated."

The booklet may be had by applying to the Italian Tourist Information Office, 745 Fifth Avenue, New York. Please mention ART AND ARCHAEOLOGY when writing that office for particulars.

THE AMERICAN SCHOOL OF PREHISTORIC RESEARCH BULLETIN

In the May *Bulletin* of the American School of Prehistoric Research, edited by Dr. George Grant MacCurdy, Director of the School, are the annual report of the Director and the usual lists of Trustees and Officers, together with four papers. Theodore D. McCown writes of "Fossil Men of the Mugharet Es-Sukhul"; Dr. Vladimir J. Fewkes of "Archaeological Reconnaissance in Yugoslavia", with the collaboration of Miss Hetty Goldman and Robert W. Ehrich; the same trio has a contribution covering the "Excavations at Starcevo, Yugoslavia"; and Mr. Ehrich alone handles "Anthropological Reconnaissance in Montenegro". The Bulletin is well illustrated. It is

issued from the office of the School at Old Lyme, Conn.

THE 1931-1932 ARCHAEOLOGICAL SURVEY OF CEYLON

Acting Archaeological Commissioner S. Paranavithana, of Colombo, in the current annual report of the work accomplished by the Survey throughout Ceylon during the year 1931-32 gives interesting details of excavations, an inspection tour through hitherto uncatalogued regions of the island for the purpose of registering all known remains, laboratory and office work, and ends his written statement with a significant paragraph—

"A series of monthly broadcast talks on archaeological topics was delivered by the Epigraphical Assistant. This series, the first of which was given in June, 1931, was concluded in January, 1932. A series of weekly lectures to teachers in English schools about art and archaeology, on account of the Colombo Museum, was initiated; but had to be abandoned after the first three lectures as there was not sufficient response. A similar course, also arranged by the Museum, in Sinhalese, to teachers and students in training, illustrated with lantern slides, was delivered by the Acting Archaeological Commissioner with better success."

SUMMER IN GERMANY

So much of artistic and scientific interest is going on in Germany this summer that the new series of pocket folders recently issued in English by the German Tourist Information Office, of 665 Fifth Avenue, New York, has a peculiar interest and value to everyone interested in music, graphic or sculptural art, architecture, archaeology and other sciences and arts, fine and applied. With single purpose and admirable discrimination, the handbooks have been as elaborately treated as if they were meant to be miniature treatises, which indeed they are, covering practically every attraction Germany has to offer to the intelligent traveler who even during a depressed season can somehow manage to make a trip of unforgettable interest, charm and value. Copies of the little brochures, which are elaborately illustrated and contain signed articles in several instances, may be had by writing direct to the office in New York.

INTERNATIONAL WOODCUT EXHIBIT IN WARSAW.

September will see an international exhibit of woodcuts in Warsaw, Poland, in which American institutions and artists are invited to participate. The exhibit will be held in the quarters of the Institute for the Propagation of Art, and inquiries made by the American Embassy in Warsaw indicate that the Ministries of Foreign Affairs and of Cults and Public Instruction are patrons of the Society for Propagation of Polish Art Abroad, the organization which is behind the exhibit. Dr. Mieczyslaw Treter is vice-chairman of the Society's executive committee, and all inquiries should be addressed to him in Warsaw.

BOOK CRITIQUES

A History of Sieneſe Painting. By George Harold Edgell. Pp. xxviii; 302. 441 illustrations. Lincoln MacVeagh, The Dial Preſſ. New York City. 1932. \$10.

Following an exhaustive appreciation of the great maſters of Sieneſe painting of the firſt half of the fourteenth century among whom Duccio, Simone Martini, and the Lorenzetti are of the firſt ſignificance, Mr. Edgell's book goes on to deal in adequate detail with the minor painters of Siena, their contemporaries and diſciples. Adding to analysis of authenticated works in the museums and collections the reſults of prolonged and intensive documentary reſearch, the book ſets forth the lives and activities of ſuch painters as Niccolò da Buonac-corſo, Bartolo di Fredi, Lippo Yanni, Barna Senese and many others, men who influenced the trend of the later ſchool. Each appears an ariſt of perſonality, with his own ſkill of drawing and color; and all diſplay that richness of decorative ideal inherent in Sieneſe painting.

Beyond this group the author leads us through the ſtudios of the men of Siena's early renaſcence, Sassetta, Sano di Pietro, Domenico di Bartolo, and the reſt, down to the decadence and death of the ſchool. In this important work the author "attempts to preſent . . . a general picture of the Sieneſe ſchool" as he moдеſtly defines the purpoſe of his book, a purpoſe well achieved. Sketching ſome fascinating poſſibilities as to origins of the eſſential and peculiar qualities of this art, Mr. Edgell analyzes its authenticated works and educes its guiding principles.

The epoch-making genius of Duccio di Buoninſegna is ſummed up thus: "Indeed the whole Majeſtas (of Duccio) is an embryo of the later ſchool, from the immediate ſucceſſors of Duccio, like Simone, to the laſt purely native Sieneſe of the type of Neroccio and Francesco di Giorgio. The careful ſtudent muſt examine [Duccio's] every compoſition. In doing ſo he will learn not only the ſource of inſpiration for the moſt important later work, but will aſſure himſelf that the ariſt has made one of the greateſt ſeries of illustrations of the 'Paſſion' ever produced, and that his work as a com-

poſer entitles him to rank with the great ariſt of the world, regardless of ſchool or date."

There are no leſs than 440 illustrations, photographs of generous ſcale, many of them full-page prints, clear and circumſtantial but perhaps rather cold and gray.

Fewer of theſe and ſome color-facſimiles inſtead one might have preferred, Sieneſe art being ſo eſſentially colorful. The ever-preſent decorative ſcheme, however, is traceable even ſtrained as it ſometimes is beyond natural fact; and this is no doubt the chief charm of Sieneſe art; this and its ſpecial and lovely color rhythms. The painters of the fourteenth century, and of the early Cinquecento, in Siena, as in Florence, followed a well-developed technique of painting in tempera on gesso-covered panels works of ſmaller ſcale, eaſel-pictures, altar-backs, portraits, things of that ſort calling for cloſer and finer handling in a certain more exact and exquisite craſtſmanship than that of freſco or moſaic on large wall-ſpaces. This had great vogue in late mediaeval Europe, this art of tempera colors within ſtrong outline and with flat modeling rather in the Byzantine tradition which lingered long intermixed with Oriental influences obviously ſtrong upon the Weſt in the days of Simone Martini and the Lorenzetti. This is Mr. Edgell's theme, in which is practically the firſt general history of Sieneſe painting; a ſcholar's work, if anything almoſt too exhaustive for the general reader.

Bernhard Berenſon has dealt adequately with Duccio, Simone and the Lorenzetti, but merely liſted the others and their works in his *Central Italian Painters*. Mr. Edgell convinces us that what matters is after all not ſo much Duccio and the others, but Siena and "one of the moſt charming ſchools in history", a mediaeval art ſtriving to expreſs itſelf in ſomewhat neo-classic faſhion, the culmination of the long-lived tradition of Byzance; the art of a ſtrongly myſtical race, deeply religious in its ariſtocratic way, painting the Queen of Heaven, as ſomeone has ſaid, in roſe and blue and gold on ivory with the exquisite technique of manuſcript illumination.

A. BURNLEY BIBB.

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Excavations at Olynthus. Part V. Mosaics, Vases, and Lamps of Olynthus found in 1928 and 1931. With a Chapter on Pre-Persian Pottery by G. E. Mylonas, a Chapter on Lamps by J. Walter Graham, and a Chapter on Byzantine Vases by A. Xyngopoulos. By David M. Robinson. Pp. xxi, 297. 209 pls.; 18 figs. [Johns Hopkins University Studies in Archaeology, No. 18.] Baltimore. 1933. \$15.

This volume is for the most part a series of excellent catalogues admirably illustrated; and the catalogues are accompanied by summaries and discussions which make clear the relations of the discoveries made at Olynthus to material known from other sources. Of the plates fourteen are colored, and of these ten reproduce mosaics, three ancient pottery, and one Byzantine pottery. The mosaics are especially interesting and beautiful and, as they appear to date from the fifth century B. C. or the early part of the fourth, are of great importance.

The pre-Persian pottery (i. e. that produced before the settlement was destroyed by Artabazus in 479 B. C.) is for the most part of local manufacture. Its beginnings appear to have been about 1050 B. C. It exhibits strong influence of East Greek fabrics, sometimes apparent revivals of Mycenaean motives. In the latter part of the pre-Persian period imported wares, chiefly, though not exclusively, Attic, appear. Some of the native ware is akin to pottery found elsewhere in Chalcidice and other parts of Macedonia. After 479 B. C. the decorated pottery is almost all Attic red-figured ware. No signed vase or fragment was found, but several are at least closely related to the work of known vase-painters.

The lamps are for the most part of local manufacture; those which are imported are mainly Attic. They are here classified with reference to the classification by O. Broneer of the lamps found at Corinth (*Corinth*, Vol. III, Part II), though it is clearly pointed out that the development of lamps at Olynthus does not quite parallel that of Corinthian lamps.

No Hellenistic or Roman pottery was discovered, but much Byzantine ware dating from the twelfth to the fourteenth century was unearthed. This is similar to Byzantine pottery found in and near Saloniki.

It is impossible in a brief notice to do justice to this book. Professor Robinson (and inci-

dentally everyone who is interested in his work at Olynthus) is to be congratulated on being able to publish so promptly and so adequately the results of his excavations.

HAROLD N. FOWLER.

The Flint Miners of Blackpatch. By J. H. Pull, with a Foreword by Sir Arthur Keith. 152 pp. 23 pls. Williams and Norgate Ltd. London. 1932. £0/10/6.

The prehistoric flint mines of Britain are among the most notable anywhere in Europe. The best known are Grime's Graves (Norfolk) and Cissbury (Sussex), the latter within sight of Blackpatch, so fully described by the author. Other flint mines in Sussex include Harrow Hill, Church Hill, Bow Hill, Windover, Tolmere, Lavant, and Stoke Down.

The author points out the features which all the flint mines have: shafts, the shape, size and number of galleries leading from them, surface dumps, and chipping floors. They were everywhere the work of a people in the same cultural stage. The miner's pick and punch were made from the antlers of the red deer; shoulder blades of oxen with the spine ridge cut off, were used as shovels. Flint was to the Stone Age what steel has been to the Age of Metals; its chief source, especially in western Europe, was the great chalk deposit in which seams of flint occur at various levels. In time the users of flint learned that the freshly mined product served their purpose better than surface flint weathered from its original matrix of chalk; hence the many extensive flint mines.

Seven shafts were opened at Blackpatch; all but one possessed galleries. The mining was done by day and by daylight. As soon as mined the flint passed to the local workshops; these were in the immediate vicinity of the shafts. Partly filled shafts were sometimes employed as workshops. As many as three workshop levels were found in one of the shafts. The workshop floors were strewn with the by-products of tool making with here and there a perfect tool, which had been mislaid or for some reason discarded by its maker. A study of the material from the workshop floors indicates that the flint mining covered a single unbroken period of occupation.

The miners lived just to the east of the mines on the hillside, which is dotted with dwelling

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sites. The dwellings were circular huts. Six beautiful flint scrapers were found in one of the hut pits. The meat diet of the miners included the domestic ox, pig, and sheep. Wild fauna known to the miners included: roe deer, red deer, wild boar, wild ox, hare, badger, vole, and hedgehog. Worthy of note because of their absence are: wolf, bat, and rabbit. From both the domestic and wild fauna, the dog is strangely absent.

Burial of the dead (inhumation and incineration) took place in the immediate neighborhood. Three burials are described. One of these was under a workshop floor. Burial under round barrows was also in vogue at Blackpatch. The author describes twelve such barrows and their contents.

GEORGE GRANT MACCURDY.

Flight into America's Past, Inca Peaks and Maya Jungles, By Marie Beale. Pp. xv; 286. 114 illustrations. G. P. Putnam's Sons, New York-London. 1932. \$3.50.

Mexico Before Cortez, An Account of the Daily Life, Religion, and Ritual of the Aztecs and Kindred Peoples, by J. Eric Thompson. Pp. x; 298. 33 plates. Charles Scribner's Sons, New York-London. 1933. \$2.50.

The ancient history of Latin America is closed to many of us by the forbidding names of the participant tribes, by the unfamiliar geography, but especially by the relative scarcity of stimulating introductory books. However, if one has the impulse to explore this extraordinary manifestation of human achievement, Mrs. Beale's *Flight into America's Past* and Mr. Thompson's *Mexico Before Cortez* provide a dramatic and rewarding foretaste of what further reading will disclose.

Mrs. Beale describes a trip by airplane across the Andes, up the coast of Chile and Peru, whence she wings off through Central America, reaching eventually Yucatan and finally Guatemala. At each of her frequent stops she gives a vivid picture of modern picturesqueness and ancient glory. Her book is succulent bait to encourage people to travel south to Latin America rather than east to Europe. She gives enough historical data to orient her observations, but her main theme is the wish for others to enjoy the rich brilliance of her impressions.

Once one is induced by Mrs. Beale to surrender to the fascination of Latin America, then

Mr. Thompson's balanced and succinct account of one of the ancient civilizations is in order, to explain and define the social circumstances under which these ancient splendors were achieved. One of the leading students of Central American archaeology, Mr. Thompson has read deeply in the records of native priests and Spanish friars. He passes in review the aspects of family life, tribal organization, religion, art, war, and science, to analyze the nature of the Aztecs and their civilization. Of all the New World civilizations, the Aztec was the most intelligently observed at first-hand, for the Spanish priests, in spite of their industrious destruction of the material culture, painstakingly recorded what the people were like. Consequently *Mexico Before Cortez*, which is free of all technical abstruseness, is of the greatest interest for the general reader.

A perusal of these two books will make professional literature more intelligible and cause popular books to be weighed more critically. Scholarly investigation would be arid indeed, if eventually it did not aid or stimulate the layman. Therefore too great emphasis cannot be laid on the service Mrs. Beale and Mr. Thompson have rendered by bringing into general recognition the often exciting, if obscure, archaeological research in Latin America.

GEORGE C. VAILLANT.

The Large Estates of Byzantine Egypt. By Edward Rochie Hardy, Jr. Pp. 162. Frontispiece and map. Columbia University Press. New York. 1931. \$3.

Egypt was governed by the Ptolemies from 323 B. C. until 30 B. C. The Roman rule extended from 30 B. C. to 395 A. D., when the empire was divided, Arcadius, emperor of the eastern portion, having Byzantium (Constantinople) as his capital. The Byzantine period was from 395 A. D. to 638 A. D. Prof. Ros-tovtzeff in his *Large Estate* treated Egypt under the Ptolemies. The present work describes Egypt during the Byzantine period. While the book is mainly concerned with large estates, it gives an admirable picture of the social, economic, political and religious condition of Egypt. The author has spared no pains to get at the source material which is mostly Greek papyri unearthed in Egypt. The foremost scholars have been consulted.

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The seven chapters deal with "Byzantine Egypt", "The Apion Family," "Other Proprietors of the Period," "Feudalism and Serfdom," "Estate Management," "The Estates in the Social and Economic Life of Egypt" and "Epilogue." One item in regard to these estates is very interesting. When the produce from them, in any year, was very meagre, due to bad seasons, some 30 to 100 percent of the rents was often remitted by the owners.

The book is fully documented and contains an ample bibliography and very complete Greek and English indices. The volume is an admirable piece of book making, having large type, thick paper, wide margins and substantial cloth binding.

GEORGE S. DUNCAN.

The Lure of the Clock. By D. W. Hering. Pp. xiv; 121. 90 illustrations. New York University Press, New York City. 1932.

The author is Professor Emeritus of Physics at New York University, and curator of the James Arthur collection of clocks and watches. The publication is a memorial to the donor of the collection and is one of the centenary publications of the University.

The late James Arthur was more than a collector of historic, unique clocks and watches. He was a distinguished horologist who designed and made clock-mechanisms and the cabinet-work of their cases. His hobby of collecting was not a purely ornamental, external recreation. He was a creator as well. The collection contains the masterpieces of distinguished and famous makers from the sixteenth century on. Many early pieces are priceless as antiques, but there are also representative specimens of the horological art and science of our own times. The collection is a well-balanced exhibit of the two industries. All that can be said of the collection can be equally well said of Professor Hering's description of it. The book is a handsome catalogue of the collection and more. It, likewise, is a horological treatise upon timekeeping and timekeepers. It is that intrinsically with the addition of superb and opulent illustrations, some in color. The man-

ner of handling the subject from a literary point of view lifts it above its scientific and referential importance into the field of pleasant reading, along an avenue that is delightfully human and picturesque. Clocks and watches are servants of man, and as a symbol of his progress in civilization, they are given an importance in this work otherwise seldom accorded.

JOHN PALMER DARNALL.

Greek Byways. By T. R. Glover. Pp. 319. The Macmillan Company, New York. 1932. \$2.50.

This is one of those rare books which may be read for pleasure and profit by layman or scholar. It is written in an informal style with a touch of humor here and there and occasional references to other lands, other times. In thirteen chapters (or better, informal discussions) the author rambles on in a most interesting way about various phases of Greek life and civilization. He touches, often tantalizingly briefly, on subjects usually omitted from histories for lack of space, but yet which are matters of interest and importance.

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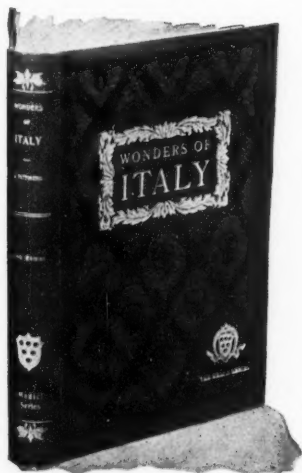
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